United Nations A/C.5/54/49

General Assembly

Distr.: General
16 February 2000

Original: English

Fifty-fourth session
Fifth Committee
Agenda item 151 (a)
Administrative and budgetary aspects of the financing of the United Nations peacekeeping operations: financing of the United Nations peacekeeping operations

Letter dated 28 January 2000 from the Chairman of the Phase V Working Group on reform procedures for determining reimbursement of contingent-owned equipment to the Chairman of the Fifth Committee

In my capacity as Chairman of the Phase V Working Group on reform procedures for determining reimbursement of contingent-owned equipment, I have the honour to transmit to the Fifth Committee of the General Assembly the report of the Working Group, dated 28 January 2000.

(*Signed*) Brigadier Muhammad **Haroon Aslam**
Chairman
Phase V Working Group

00-30207 (E) 290300

Report of the Phase V Working Group on reform procedures for determining reimbursement of contingent-owned equipment

Contents

		Paragraphs	*Page*
I.	Introduction	1–7	4
II.	Summary of statements from the Secretariat	8–9	5
III.	Presentations in the Working Group, assignment and work plan	10–14	5
IV.	Performance standards and reimbursement rates review	15–87	6
	A. Major equipment	16–45	6
	B. Self-sustainment	46–78	9
	C. Medical support services	79–87	13
V.	Post Phase V Working Group	88–96	16
VI.	Closing remarks	97–100	16
Annexes			
I.	Contingent-owned equipment — Triennial review (Nation A)		18
II.	Contingent-owned equipment — Triennial review (Consolidation)		19
III.	Member States contingent-owned equipment costing		20
	A. Contingent-owned equipment (special cases) data provided by the Secretariat		21
	B. Special case equipment — Data provided by the Secretariat		22
	C. Contingent-owned equipment (major equipment) comprehensive review		28
IV.	Consolidation format for comprehensive review of major equipment rates		41
	A. Troop-contributor nation sheets		42
	B. Dry lease		44
	C. Maintenance cost format		45
	D. Petroleum, oil and lubricants cost format		46
	E. Summary		47
V.	Internal transportation data		48
VI.	Methodology for determining self-sustainment rates		49
VII.	Self-sustainment performance standards		51

VIII. Medical support services 52
A. Minor equipment — Laboratory kit 104
B. Minor equipment — Treatment kit 104
C. Minor equipment — Diagnosis kit 104
IX. Scope of work of the Post Phase V Working Group 105

I. Introduction

1. The Phase V Working Group on reform procedures for determining reimbursement to Member States for contingent-owned equipment was established pursuant to General Assembly decision 53/480 of 8 June 1999. The Secretary-General, in application of the same General Assembly decision, convened the Phase V Working Group, which met from 24 to 28 January 2000, to review and update the Phase II and Phase III standards and rates of major equipment and self-sustainment categories in accordance with its resolution 49/233 A of 23 December 1994.

2. In its deliberations, the Working Group took note of the reports of the Phase II (A/C.5/49/66), Phase III (A/C.5/49/70) and Phase IV (A/C.5/52/39) Working Groups, the report of the Secretary-General on the first full year of implementation of the reformed procedures for determining reimbursement to Member States for contingent-owned equipment (A/53/465) and the report of the Advisory Committee on Administrative and Budgetary Questions on the same subject (A/53/944).

3. The original mandate of Phase V, as detailed in General Assembly resolution 49/233 A, was to conduct a periodic review and update of the Phase II and Phase III standards to be completed on a triennial basis, with the first review scheduled for March 1998. The original mandate was subsequently amended by the Phase III Working Group, which recommended in its report (A/C.5/49/70, para. 51(c)) that reimbursement rates for major equipment wet and dry leases, self-sustainment rates and associated provisions for loss, damage and environmental and intensified operational use be reviewed by the Secretariat at the end of the first 12-month period for initial validation and biennially thereafter.

4. In August 1999, the Secretariat issued an invitation to Member States to participate in the Phase V Working Group and requested them to submit costing data on major equipment and self-sustainment by 30 September 1999. At the end of December 1999, in the absence of sufficient data from Member States, the Secretariat made a further request to Member States for additional costing information for special cases equipment with a view to developing generic rates for as many special cases as possible. However, because of the relatively short time available to complete the costing, Member States could not supply the data.

5. The recommendations contained throughout the present report must be read in conjunction with the recommendations contained in the Phase II, III and IV reports. In some cases the recommendations of the present report supplements and/or overrides those contained in the Phase II, Phase III and Phase IV reports.

6. The Working Group was presented with a number of issue papers prepared by various Member States and the Secretariat. The issue papers were referred to sub-working groups for detailed consideration. The present report summarizes the discussions and key recommendations of the Working Group. The information contained in the annexes to the present report provides additional rationale and technical considerations and, as such, constitutes essential complementary data upon which the recommendations should be analysed and implemented. The Working Group addressed the following issues, grouped into three major categories, and made recommendations thereon:

(a) Major equipment:

(i) Methodology for periodic review of major equipment;

(ii) Review of major equipment rates;

(iii) Establishment of standardized reimbursement rates for special cases:

- Airfield support;
- Combat vehicles;
- Demining equipment;
- Armament;
- Heavy engineering equipment;
- Support vehicles;
- Various logistics equipment;

(iv) Standard cost for painting and repainting of vehicles and other items of major equipment;

(b) Self-sustainment:

(i) Methodology for periodic review of self-sustainment;

(ii) Review of self-sustainment standards for existing categories and for two new categories as per Phase IV: "Main Camp Catering" and "Main Camp Electricity" and rates for these categories;

(iii) Review of self-sustainment standards;

(iv) Feasibility of standardizing inland transportation costs;

(v) Reimbursement for flak jackets - existing missions;

(c) Review of levels of medical support and establishment of rates of reimbursement as presented in and annexed to the Phase IV Working Group report (A/C.5/52/39).

7. Brigadier Muhammad Haroon Aslam of the delegation of Pakistan chaired the Phase V Working Group. Colonel Godfrey Chanakira of the delegation of Zimbabwe acted as Vice-Chairman and Major Gérard Sénéchal of the delegation of Canada was elected Rapporteur.

II. Summary of statements from the Secretariat

8. Heddi Annabi, Assistant Secretary-General, Department of Peacekeeping Operations, delivered the opening statement on behalf of Bernard Miyet, Under-Secretary-General for Peacekeeping Operations. He said that he looked to the Phase V Working Group to have a constructive exchange of views and to arrive at concrete agreements aimed at further progress towards the goal of a simple, equitable and responsive system for the reimbursement for contingent-owned equipment. He also indicated that the system should not become cumbersome and therefore special cases should be kept to a minimum. The basis for the existing rates, as well as the methodology to be developed during the present review, should provide a solid base for future review exercises. The Secretariat was proposing that many special case items could be considered standard items of major equipment for which a standard rate of reimbursement could be agreed. A further step would be to group together related equipment under one reimbursement rate rather than to define a detailed item-by-item list.

9. Mr. Annabi also indicated that the largest number of special-case reimbursement rates had been negotiated for medical services. The Secretariat had prepared a background paper that included a comparison between the current and proposed methods of reimbursement for medical services. The Secretariat recommended that the Working Group adopt the recommendations it has made in this area. Since the Phase IV Working Group recommendations had only been approved in October 1999, the Secretariat had not had sufficient time to complete an analysis of performance standards and ranges of military pattern equipment as requested in A/C.5/52/39. The update of the contingent-owned equipment Manual is a continuous process which will take into consideration the previous phases of the Working Group as well as recommendations of the Phase V Working Group once approved by the General Assembly. Finally, Mr. Annabi indicated that the Secretariat had provided discussion papers on special cases, inland transportation, painting and repainting of vehicles, self-sustainment standard and rates and that the Secretariat believed that simple solutions could be found for these areas.

III. Presentations in the Working Group, assignment and work plan

1. Assignment of focal point responsibilities

10. The delegations to the Phase V Working Group agreed to assign sub-working group focal points as follows:

(a) Major equipment — Major Robert Hanebrink (Sweden);

(b) Self-sustainment — Lieutenant Colonel Carlos Alberto Rubial (Argentina);

(c) Medical Support Services - Commander Stefan Stein (Germany).

2. Presentation of the Secretariat to the plenary session of the Working Group

11. The Secretariat tabled four discussion papers on the following topics:

(a) Proposal on reimbursement for medical and dental services;

(b) Determination of standard reimbursement rates for "Special Cases", major equipment and the generic fair market value (GFMV);

(c) Determination of standard reimbursement rates for the painting and repainting of vehicles and major equipment;

(d) Determination of standard reimbursement rates for inland transportation for major equipment.

12. During the afternoon session on 25 January 2000, the Secretariat also presented an issue paper on self-sustainment standards and rates for consideration to the sub-working group on self-sustainment.

3. Work plan

13. Considering the responsibilities assigned to the Phase V Working Group and the limited time and limited resources available to accomplish its task, the delegation of Canada recommended that the efforts be guided and focused by a realistic work plan and presented a written

proposal detailing how the following issues should be addressed by all three sub-working groups:

(a) Type of review/update desired;

(b) Review frequency;

(c) Organization and process;

(d) Special case equipment and new categories;

(e) New items not currently covered by contingent-owned equipment (COE).

14. The Chairman requested that all sub-working groups consider this proposal in their deliberation.

IV. Performance standards and reimbursement rates review

15. The Phase V Working Group was tasked to review the performance standards and reimbursement rates of major equipment, self-sustainment categories and medical support services.

A. Major equipment

1. Methodology for periodic review of major equipment

16. In the report of the Phase IV Working Group on COE it was stated that the "Secretariat together with Member States should conduct a major review of the COE Manual to ensure that it incorporates the recommendations of Phase II, III, and IV reports" as approved by the General Assembly and should "specifically review and validate reimbursement rates, procedures and standards" (A/C.5/52/39, paras. 93 (a) and (b)).

17. Neither General Assembly resolution 50/222 of 11 April 1996 nor related reports indicate who will be in charge of the revision or what should be the timetable and which procedures should be followed.

18. The Phase IV Working Group chose to defer its decision on frequency and procedures for review of rates to Phase V. This meant that Member States, when asked to provide data for the Phase V Working Group, were uncertain as to what data to bring and in what format it should be. This Working Group considers that this lack of guidance has made the determination of equitable rates at Phase V all the more difficult.

19. The Working Group considered that the COE reimbursement system should seek to maintain its validity in a changing world, as far as practicable, for instance, where prices go up or down as new technology is developed. The COE reimbursement system must therefore be dynamic.

20. It is in the interest of the Member States and the Secretariat that the dry/wet lease system provides Member States a fair reimbursement. Although the system is considered equitable for the moment, it is evident from the experience of the technical and financial experts of the Working Group that the cost of military equipment, technology and operational needs changes continually. Therefore, a periodic review of the rates and standards is required.

21. The goal of this Working Group was to maintain the initial intentions of the COE programme and general principles and guidelines (A/C.5/52/39, annex I, p. 16). The principles of simplicity, equity, transparency, comprehensiveness, flexibility and portability, as well as the provision of high quality cost-effective logistic support in addition to the requirement for financial control and audit, have been the focus in developing the COE system. A standardized procedure involving Member States and the Secretariat was considered an advantage.

22. In keeping with the general principles of COE and to reduce the workload on the Secretariat and Member States, indexing the existing COE rates is a reasonable method of update. Although the Working Group did not know of any international indices specific to military equipment costs, it believed that indices could be developed as representative of the equipment categories in the COE Manual.

23. While the categories of equipment are generic, the existing rates are based on cost data both from the Secretariat and Member States. The review should be carried out on that basis.

24. To develop such indices, each country would review each category of equipment to determine the percentage change in the GFMV of that category since the last update to the COE Manual (e.g. 1995 data). Each country would average the percent change for each category within a group of categories (e.g. for telephone systems).

25. Each Member State would then forward their respective "group index" to the Secretariat where it would be averaged with the indices from other Member States. The new average index would be applied to each category within a particular group of categories to determine the new rates.

26. The Working Group recommends the adoption of a triennial rate review as an agenda item using indices for

generic categories to be applied to all equipment listed in the COE Manual. The national index is the result of the old weighted average national GFMV relative to the new weighted average national GFMV expressed over a three-year period. Relevant national numbers should be submitted to the Secretariat. The future working groups should collectively derive an appropriate rate to be applied to the figures in the COE Manual for subsequent consideration and approval by the General Assembly through the Advisory Committee on Administrative and Budgetary Questions and the Fifth Committee. A comprehensive review of rates, which will revisit all assumptions underlying the current model could be undertaken at the request of the General Assembly or at least every fifth cycle (15 years).

27. Member States would be required to provide their data for the triennial review in the format detailed in annex I. Annex II illustrates the methodology to be employed by the Secretariat and the Working Group in the assessment of the aggregate rate. Annex III provides an explanation of the process for both special cases and a comprehensive review. Similarly, annex III provides Member States with the format for their submission of data for both special cases (annex III.A) and a comprehensive review (annex III.B) only if the General Assembly so advises, or at least every 15 years. Annex IV provides an illustration of how the Secretariat would compile the cost data provided by Member States for the comprehensive review of major equipment and rates.

28. It is recommended that the above approach be applied for future rate review. The following timetable is proposed by the Working Group:

First review	Base data on 1995-1999
2003 review	Base data on 1999-2002
2006 review	Base data on 2002-2005
2009 review	Comprehensive review required

29. To be robust the model must take into account the special cases that arise between the triennial review. It is therefore recommended that the Secretariat provide relevant details of those special cases that may have arisen between reviews to Member States at least six months before the triennial review (annex III.A to the present report).

30. The purpose of the above model would be to enable future working groups to consider whether any special cases should be assigned GFMVs and be included in the Manual and in what category they would appear. Member States would complete annex III.A for such special cases.

2. Review of major equipment rates

31. Since the Working Group was not able to review the rates, the existing rates should be maintained in the interim until subsequent changes are made.

3. Review of standardized rates for special cases

32. During the Phase III Working Group, a number of major equipment items were not given a GFMV or a standard rate of reimbursement. It was decided that whenever these items would be required, a "special case" rate would have to be calculated and negotiated with troop contributors. A list of all "special cases" negotiated or being under negotiations since the implementation of the new system of COE reimbursement (with the exception of medical equipment) was provided to the Working Group for consideration (annex III.B). It included GFMV, the useful life and the monthly maintenance cost reported by the troop contributors, and the rate negotiated, for each item where applicable.

33. Several categories such as tanks, demining equipment, radar and navigational equipment, armament, heavy engineering equipment and various logistics equipment have been previously negotiated under special cases. Based on the experience to date, the Secretariat recommended that standard rates be developed for these major equipment items.

34. At the present time, each "special case" requires the troop contributor to provide information on the price paid for the item in the home country, the monthly maintenance cost, and the expected useful life. The Secretariat reviews this information and compares it to rates approved for similar equipment from other troop contributors, to ensure fairness and consistency. The process has worked relatively well to date. However, it is administratively complex and can cause considerable delays in the negotiation and finalization of a memorandum of understanding.

35. The Working Group felt that it was in the interest of the Member States and the Secretariat that the new contingent-owned equipment procedures are as effective and flexible as possible. The Working Group reviewed the information provided by the Secretariat with the purpose of establishing some subcategories that would allow for a reduction of special cases. The Working Group at the same time expressed concern with respect to providing excessive detail, which would contravene the principle of simplicity.

36. The Working Group recognized that special equipment had to be a part of the system in order to allow flexibility and cost-effectiveness. The Working Group recommended that the following subcategories and changes with respect to the major equipment list, as outlined in A/C.5/49/70, be approved:

(a) Airfield support equipment:

"Radar" to be removed and be replaced as "All radar" and as "special case";

(b) Combat vehicles:

(i) Tanks divided into the following subcategories:

- Main battle tank, heavy, to be classified by caliber and weight;
- Main battle tank, medium, to be classified by caliber and weight;
- Tank recovery, heavy, to be classified by capacity;
- Tank recovery, medium, to be classified by capacity;
- All other tanks — special case;

(ii) The current categories of infantry carrier, tracked and wheeled, are further divided into heavy and light subcategories;

(c) Demining equipment — remains special case;

(d) Armament — guns, cannons and missile launchers, all remain special case;

(e) Heavy engineering equipment — all remain special case;

(f) Support vehicles — no change;

(g) Logistic equipment:

(i) Water tanks/bladders can be added by size;

(ii) Water purification station can be added by capacity;

(iii) Fuel tank/bladders can be added by size.

37. All rates are to be established and reviewed in accordance with section IV, paragraphs 24 to 29 of the present report. In the case that equipment which has been listed as special case comes into common use among several Member States, the Secretariat can propose those items under a new category of major equipment. This would then be reviewed under the established methodology for reviewing the COE system.

4. Standard cost for painting and repainting of vehicles and other items of major equipment

38. Under the current methodology, the painting (prior to deployment) and repainting (upon repatriation) of vehicles and major equipment items is reimbursed by the United Nations upon presentation of a claim by contributing countries.

39. The claim is required to be detailed and needs to include proof of payment. Experience since the implementation of the new COE system has shown that the reimbursement process for painting of vehicles and equipment is cumbersome for troop contributors. It requires substantial review by the Secretariat to ensure that the claim represents a reasonable amount and that it is fair and comparable to the amount claimed by other countries for similar equipment.

40. The Secretariat provided the Working Group with a list of average amounts paid for claims on painting and repainting of vehicles and recommended that: (a) standard rates be developed for painting and preparation of vehicles and major equipment; or (b) the painting and repainting of vehicles be included as part of the maintenance cost of the associated major equipment.

41. The Secretariat believes that either alternative would allow for a speedier, consistent and more transparent reimbursement system, subject to confirmation by the field mission that the standards for painting and United Nations markings were met.

42. Review by the Working Group of the data provided by the Secretariat revealed that:

(a) The United Nations pays once for the painting at the start of a mission and once for the repainting at the end of a mission into the original national standard;

(b) The repainting into a country's original colours (Army infrared-reflecting Green, camouflage patterns) is more expensive than painting into United Nations colours;

(c) The Working Group makes the following observations on the costs for painting and repainting of different vehicles:

(i) Military vehicles:

- Vehicles such as armoured personnel carriers, jeeps, trucks, etc. are supplied in large numbers and represent the majority of the equipment;
- Engineering equipment, refrigerator trucks, etc. are sometimes unique vehicles in a mission and more expensive to paint and repaint.

(ii) Police vehicles are expensive to return into national colours due to multicoloured paint schemes, decals, numbers and titles.

43. Although the Working Group understands that the data provided by the Secretariat is the average of the costs submitted by troop contributors under different claims, the Working Group finds it strange that in some cases the repainting costs of some vehicles are lower than the painting costs.

44. The Working Group recommends that different categories of major equipment requiring painting be grouped into larger groups to create an easy-to-use table in which the cost of repainting is reflected as being more expensive than painting.

45. The Working Group further recommends that the Member States provide the Secretariat with the necessary data per group so that the average price can be calculated to complete the table.

B. Self-sustainment

1. Methodology for periodic review of self-sustainment

46. When the self-sustainment reimbursement rates were established in 1995 in London, the Working Group noted that periodic reviews of the rates would have been required in order to account for global and regional fluctuations in economic factors. Since the original rates were set, there have been no adjustments (either up or down) to the rates now contained in the COE Manual, despite the fact that there is widespread agreement amongst the Member States that:

(a) The new system is much more user friendly, transparent, sustainable and simpler than the previous system;

(b) There is a genuine desire by both the Secretariat and troop contributors to apply the intent of the Manual on Policies and Procedures concerning Reimbursement and Control of Contingent-owned Equipment of Troop-contributing Countries participating in Peacekeeping Missions (COE Manual) to the benefit of both parties;

(c) Even though there is no apparent methodology to support the establishment of the original data, Member States are satisfied with the current arrangements.

47. Despite the absence of a rate adjustment, it is apparent that with the good advice provided by respondent Member States to the Working Group, the rates may have fallen somewhat behind world trends.

48. What is needed therefore is a transparent, sustainable and auditable review system that does not cause unnecessary hardship to either troop contributors or the Secretariat. The review must be linked to the major equipment review system in order to avoid duplicating administrative efforts.

49. In reviewing the rates of self-sustainment periodically, it is important that the interests of all Member States are acknowledged. There are two main methods of achieving this, namely:

(a) To adopt an annual, biennial, triennial, quadrennial, quintennial or other such periodical adjustment based on a rate of currency inflation set by an internationally recognized agency such as Standard and Poors or Bretton Woods;

(b) To adopt a method whereby troop contributors will, on request from the Secretariat, provide nationally adjusted (including inflation, currency fluctuations and economic factors), historically-based self-sustainment information to a central database, managed by the Secretariat. That information, will be widely disseminated, without further analysis or prejudice, to all contributors (for reasons of transparency, auditability and sustainability) in order to establish an average rate of change for all troop contributors throughout the period. The periodical adjustment of self-sustainment rates would be aligned to the review of major equipment reimbursement rates.

50. The Working Group considered it difficult to adopt the proposal in paragraph 49 (a) owing to the differences in exchange rates, inflation factors and economic factors currently being experienced throughout the world. In addition, the adoption of any form of standard rate may indeed disadvantage troop contributors if there is any fault in the base data (either expressed or implied). The latter proposal, though relying on timely contributions by troop contributors through permanent missions, was considered to be more robust because:

(a) National inflation factors can be included easily and therefore an international factor is not required;

(b) Historical data can be used so that if there is a wide variance in rates, an individual troop contributor can be requested to clarify before the proposal in total is presented to the General Assembly through the United Nations due process;

(c) Maximum knowledge sharing is encouraged (albeit informal) so that if a troop contributor has a large variance, it can be explained out of session;

(d) Geographical considerations are more easily entertained (if, for instance the Northern Hemisphere is forced to endure an economic factor that is not replicated by a shift in the Southern Hemisphere, Southern Hemisphere Member States will understand and vice versa);

(e) The more troop contributors contribute to the database, the more robust the database becomes (an example database is attached, annex VI, based on current information).

51. Having determined the methodology as presented, and sought troop contributors contributions of data, the data would best be reviewed by an open-ended Working Group convened to ratify also the average of data provided by troop contributors and approve its presentation to the General Assembly.

52. The Working Group recommends:

(a) Acknowledgement of the difficulties that would be experienced with setting rates based on an international adjudication of inflation\currency\regional\eventualities;

(b) Endorsement of the concept of an average troop contributors methodology, aligned to the review period set by the Major Equipment Working Group (3 years). Data should be requested by the Secretariat allowing sufficient time to establish base rates and distribution of the data (without analysis) to all troop contributors for review by the open-ended Working Group. It should be noted that the intent of this Working Group is that the highest and lowest rates supplied by troop contributors be deleted from consideration and that an average figure for each category be calculated using the remaining rates. A suggested outline for methodology to determine the self-sustainment rates is attached to this report as annex VI.

2. Review of self-sustainment standards for existing categories and for two new categories as per Phase IV: "Main camp catering" and "Main camp electricity" and rates for these categories

53. During the Phase IV negotiations and discussions, (A/C.5/52/39, para. 79) the Working Group recommended the creation of two new categories of self- sustainment and assigned temporary reimbursement rates to them. The recommended categories were "main camp catering" and "main camp electricity generation". These categories were driven by the premise that, often, sustainment of outlying company and platoon posts by a troop contributor was technically more difficult and costly than sustainment of a main base, for which the potential for maximizing economies of scale exists.

54. The temporary reimbursement rates assigned under paragraph 51 of document A/C.5/52/39 were based on the rates currently contained in the COE Manual (annex B, chap. 3 (3-B-2) and annex B, chap. 3 (3-B-4)) since no data existed at the time to assign an appropriate rate.

55. The Working Group reviewed the recommendation under A/C.5/52/39, paragraph 51 (Phase IV report), which created additional categories of self-sustainment for main camp catering and main camp electrical power generation. Given the fact that there has been no requirement for the proposed categories since the recommendations were made, the Working Group concluded that there is no requirement to separate categories for these services. Additionally, the Working Group recommends that the existing catering and electrical self-sustainment categories and their associated rates be used for main camp as well as the currently covered sub-unit locations. Notwithstanding this recommendation, the provision of electrical power and reticulation to main camps from field generators of a capacity larger than 20 kVA (20 kW) and mobile refrigeration, will continue to be reimbursed under the existing major equipment category.

3. Review of self-sustainment standards

56. When the self-sustainment reimbursement standards were published, the intent of the COE Manual was to present a single statement of the standard (capability) required to be eligible for reimbursement and offer guidelines as to what was required under this concept. Unfortunately, the guidelines as to requirements have tended to focus on equipment required to meet the standard and so, have become quite prescriptive.

57. There was widespread consensus among the delegates that the self-sustainment standard is what the United Nations wants in order to approve reimbursement and the guidelines have become the method of achievement, leaving very little scope for troop contributors to achieve the standards in another manner.

58. By focusing on the guidelines of equipment, rather than on the capability required, troop contributors who routinely deploy non-technological capabilities may be placed at a disadvantage.

59. The Working Group discussed six categories, including:

(a) Catering: Discussion centred on the prescriptive nature of the standards and guidelines. The current guidelines focus on how the standard is to be met and allows

little freedom for troop contributors to meet the standard according to their national system and requirements. The Working Group also discussed the fact that the current rates and standards contained in the COE Manual relate to the camps of all troop contributors and not just to subunit locations. During this discussion, Canada proposed the sub-categorization of several sustainment categories as a means of minimizing the possibility that a contingent might not receive reimbursement when it meets most, but not all, of the requirements. A consensus was not reached on this proposal, however, it was agreed that the issue paper should be attached (annex VII) to the Working Group report, for future reference and consideration.

(b) Office: Discussion centred on the provision of an electronic data processing capability (and associated software) in order to effectively administer the troops. There was consensus that the current standards are appropriate, however, a review of the rate of reimbursement will be carried out during the overall process of rate review.

(c) Bedding: There was some discussion on whether the current reimbursement of soldier's kit of US$ 65 per soldier be included in the required list for sleeping bags or blankets. There was consensus that the standard expressed is appropriate.

(d) Furniture: Discussion centred on the difficulties with the prescriptive nature of the standard and the fact that verification is difficult. There was consensus to amend the standard under furniture (chapter 3, 3-B-11) to read "for each person, a bed, mattress, night stand, table light and locker, or other appropriate furniture to provide an adequate living space".

(e) Welfare: Discussion centred on the prescriptive nature of the standard and whether the current rate is too low. The rate will be reviewed during the overall rate review. Consensus was reached to amend the standard for welfare to read (chapter 3, 3-B-11) "appropriate levels of equipment and amenities for the morale and well-being of troop contributor's personnel".

(f) Field defence stores: Discussion centred on the possible need for two rates, one is for the initial mission start-up (where troop contributors are expected to deploy self-sufficient for 60 days) and the other is for ongoing reimbursement (which is assessed as being a lesser rate). The Working Group was advised that the original rates were established based on an historical average value. Consensus was reached that there should be one rate for that category.

60. The Working Group recommends the following:

(a) The standard for catering be amended to read:

(i) "Provide kitchen facilities and equipment, including supplies, consumables, dishes and cutlery for all their camps";

(ii) "Provide deep freeze (14 days where required), cold (7 days) and dry food storage for kitchen facilities";

(iii) "Provide kitchen facilities with hot dishwashing capabilities"; and

(iv) Ensure kitchen facilities have hygienic equipment that maintains a clean and healthy environment".

Note: Where refrigerated trucks (non-static) are required this will be reimbursed separately under major equipment.

(b) The standard for furniture be amended to read: "For each person, a bed, mattress, night stand, table light and locker, or other appropriate furniture to provide an adequate living space".

(c) The standard for welfare be amended to read: "Appropriate levels of equipment and amenities for the morale and well-being of troop contributor's personnel".

(d) All other standards be accepted.

4. Feasibility of standardizing inland transportation cost

61. The United Nations is responsible for the cost of inland transportation from its agreed originating location to an agreed point of embarkation as part of the COE negotiation process.

62. Currently, troop contributors are expected to claim actual and reasonable costs after such movement has taken place. Determining actual and reasonable costs is often difficult for troop contributors to do, especially when they move *matériel* and personnel by military means and cannot therefore easily provide documentary evidence of an acceptable national commercial rate. Some troop contributors have the ability to lodge a claim for reimbursement of inland transportation, however, others traditionally do not submit such claims, either because of the complexity of the claims process or because they are unaware of the entitlement to claim reimbursement.

63. In addition, the Secretariat currently spends considerable time and staff effort validating retroactive claims received from missions that have been liquidated. It is generally acknowledged that the claim process can be difficult due to the fact that inclusion of inland transportation expenditure is not currently budgeted for and

it must be funded from possible savings obtained under other expenditure categories when a troop contributor presents such claim.

64. Geographical and environmental factors also affect some troop contributors ability to deploy *matériel* and personnel from an agreed originating point to an agreed point of embarkation. This is particularly so for landlocked troop contributors whose deployment is dependent on border crossings, changes of mode of transportation owing to changes in altitude, climate, geography or environment. All these factors directly affect troop contributors' direct costs.

65. Concern was expressed regarding the difficulty of producing evidence in support of claims for inland transportation from commercial sources. This has resulted in some troop contributors being disadvantaged by not being able to raise a retroactive claim.

66. The application of a basic formula was considered by the Working Group to be extremely difficult to achieve, given the wide range of variable factors that affect each troop contributor. In establishing any standard rate, the Working Group considered that most internal costs would be incurred prior to actual movement of personnel and *matériel* and mainly absorbed in preparation for movement (packaging, manifesting and loading).

67. While a basic formula could be appropriate for simple cases, there is a need to have a method by which troop contributors facing difficulties with inland transportation could be adequately reimbursed while taking into account:

(a) Climatic changes en route to the point of embarkation;

(b) Environmental changes;

(c) Border crossings (crossing from one Member State into another for the purposes of transiting to a point of embarkation);

(d) Changes of transportation modes (from road to rail, different rail gauges, road to water).

68. The Working Group noted that they did not have sufficient expertise to effectively prescribe a formula or its attendant increments at this time.

69. The Working Group acknowledged the difficulties with the current retroactive claims process, which is based on actual and reasonable submissions and requires evidence in the form of a commercial invoice or a military debit note if a troop contributor deploys by military means.

70. The Working Group accepted the fact that it appears that the methodology for claiming retroactively is either not well known amongst troop contributors or that there is a perception amongst them that the claims process is cumbersome.

71. The Working Group also accepted the fact that claiming for internal transport is a troop contributor's responsibility on a case-by-case basis and that a list of requirements for the satisfactory settling of a claim should be included in the COE Manual in the form of an annex.

5. Reimbursement for flak jackets — existing missions

72. As background information, in the United Nations Peace Force (UNPF) all countries were reimbursed for flak jackets from the beginning. In 1994, UNPF was split up into the United Nations Protection Force (UNPROFOR) (Bosnia and Herzegovina), the United Nations Confidence Restoration Operation in Croatia (UNCRO) (Croatia) and the United Nations Preventive Deployment Force (UNPREDEP) (the former Yugoslav Republic of Macedonia), under the umbrella of UNPF. On 18 December 1995, UNPROFOR and UNCRO left the United Nations umbrella and became the multinational implementation force (IFOR). However UNPREDEP remained a United Nations mission.

73. All troop contributors participating in UNPREDEP were reimbursed at 40 per cent per year for flak jackets under the old system. In February 1996, Finland, who was the lead nation at that time, converted to the new system. However, that was the only change in the mission: UNPREDEP still had the same mandate and mission factors.

74. In October 1998, there were negotiations between the Secretariat and Nordic countries with Sweden as lead nation to increase the Nordic participation to UNPREDEP at the request of the United Nations. As all conditions and mandate were the same as it had been from the beginning, the Nordic countries put flak jackets as "unique equipment" with a monthly rate of US$ 33. (The flak jackets had to be included somewhere in the new system as they were not covered in the COE Manual.) In these negotiations, it was recommended by the Secretariat that the Phase V Working Group should handle this issue.

75. It should also be pointed out that the Phase IV Working Group recommended that a "soldier's kit" list be developed by the Secretariat where items like the flak jacket could be recognized. However, this was not done since all missions are different and it is more or less impossible to create an "all-mission-covering" soldier's kit. It should be

unique for each mission, so as not to mix equipment for tropical and arctic climates into the same soldier's kit.

76. It was the opinion of the Working Group that the flak jacket referred in the soldier's kit list should be a fragmentation vest. The requirement for provision of a heavier form of specialist flak jacket should be treated as unique under the self-sustainment provisions, listed as "personal protective equipment" with a rate of reimbursement to be set under the advice of the expert panel.

77. It was the consensus of the Working Group that, for ongoing missions with no changes in mandate and mission factors, the same rules as applied at mission startup should also continue to apply during the remaining period of the mission.

78. The Working Group recommends that:

(a) The soldier's kit list be amended to include a basic flak jacket (fragmentation vest) and that any specialist flak jacket be added as "personal protection" under the unique equipment self-sustainment category and that the standard rate of US$ 65 for soldier's personal kit be reviewed by the Secretariat accordingly;

(b) The troop contributors involved in missions at the time when the reimbursement for major equipment and self-sustainment rules were changed and who increased their commitment of either personnel or *matériel*, be granted authority to claim reimbursement for the increased flak jacket commitment at the rate that was prevalent at the time the troop contributors originally entered the mission.

C. Medical support services

79. During the Phase IV Working Group, a revision of the policy on medical services was proposed, (A/C.5/52/39). The proposal was researched and developed by two experts in the medical profession with field background and experience of the new system for contingent-owned equipment reimbursement. It introduced the concept of standardization of Tables of Organization and Equipment for medical facilities and recommended a revision and definition of the levels of medical services. The revision includes the creation of a new level III field hospital, as well as "GFMV" and "useful life" for major equipment for each level of service.

80. The concept of a Level III Field Hospital was approved as part of the Phase IV Working Group recommendations. However, it was decided that, as the costing for major equipment and self-sustainment is very specialized and specific, it should be reviewed by each country and that approval or comments be made at a later date.

81. The proposal recommended a review of the policy to allow reimbursement of major equipment for all medical facilities regardless of whether they provide medical services "force-wide", to a "sector" or only to a unit. It also recommended the adoption of "GFMV" for major medical equipment for Levels I, II and III. Each level includes the minimum major equipment required, listed in the Table of Organization and Equipment in A/C.5/52/39. The GFMVs were based on World Health Organization standards, modified to take into account experiences and conditions in theatres of operations. The price of each major equipment item was taken from published and public documentation of medical equipment procurement sources as well as from experience and "special cases" information received from a number of countries. The utilization of reimbursement rates derived from combining GFMVs, the proposed "useful life" and a standard percentage for the monthly maintenance cost, if approved, would allow for a fair, consistent and transparent reimbursement procedure to troop contributing countries. In addition, it will facilitate determining, early in the planning process, the types of major medical equipment required for operational purposes in the field.

82. This proposal was based on actual expenses and costs of all medical facilities, self-sustainment services and consumables in peacekeeping operations, averaged over a period of six years. Given that actual costs were utilized, the proposed revised rates for self-sustainment should compensate for all expenses and costs as they pertain to self-sustainment. If a troop contributor provides services of more than one level, those levels will be accumulated accordingly. However, dental and laboratory services will only be reimbursed once.

83. The Secretariat considered that the proposal presented during the Phase IV Working Group represents a major improvement in areas of policy, administration, implementation and reimbursement with regard to medical services, and that this will contribute to the provision of the most suited medical facilities in missions. The Secretariat also believed that the compensation system proposed under these revised policies and guidelines would be more representative, complete and fair than the current one. It would also be administratively simpler to implement in a consistent manner.

84. The Secretariat recommended that this proposal be reviewed by the Working Group and that it be approved in its entirety.

85. The Working Group considered that the levels of medical equipment and personnel presented in the 1997 Secretariat proposal are intended to present a reasonable and operationally effective set of minimum standards of medical support and reimbursement. Where, as determined by the United Nations, an operational requirement exists for a country to deploy personnel and/or equipment in excess of the standards specified in annex VIII, eligibility for these additional personnel/equipment will be determined during the COE negotiation process, subject to final approval by the United Nations. Deployment of less medical equipment or personnel than shown in annex VIII may also be negotiated between the United Nations and the country involved, subject to final approval by the United Nations. The results of those negotiations will determine eligibility for reimbursement. The principle of reasonability will be applied in such discussions/decisions.

86. The Working Group recommends to the General Assembly that the medical support proposal by the Secretariat be approved, with the following changes to the annex VIII (previous annex III to the Phase IV Working Group report, A/C.5/52/39) revised medical support services:

(a) References in pages 20, 23, and 29 (Level I) in respect of supported troop strength, should be changed from "500 to 700" to read "up to battalion level";

(b) References in pages 20, 23, 30 and 31 in respect of supported troop strength, should be changed from a "troop level of 1,000" to read "up to brigade level";

(c) References in pages 20, 23, 32 and 33, in respect of supported population, should be changed from "based on a troop strength of 3,000 to 5,000" to read "as operationally defined";

(d) Strength of medical units personnel has to be counted as an approximation;

(e) Throughout annex VIII the term "force-wide" should be replaced by the term "force level". Force level is defined as the force for which medical aid is provided at Levels I, II, and III. Level I units are available to be tasked by mission headquarters to provide medical support to elements of the Force other than themselves (e.g. to civilian police, military observers, civilian staff and other military elements of the Force). On that basis, given that such availability for tasking satisfies the criteria provided by the Phase III Working Group in its report (A/C.5/49/70, p. 20, para. 3), countries providing Level I medical support are entitled to reimbursement for major equipment costs;

(f) Pages 19, 21, 22, 24 of annex VIII: If a lab is included in Level I on request of the United Nations, then it must be reimbursed;

(g) Pages 19, 21, 22, 24 of annex VIII, Remarks: delete last sentence, "However, dental and lab services will only be reimbursed for one level";

(h) Page 19, B.2. Chapter 3, annex I, paragraph 13 of annex VIII: delete references to "blood and blood products". Again, on page 21, delete first bullet concerning "blood and blood products". Again, on page 23, delete first bullet under "Blood and blood products". Replace with the following: "Blood and blood products will be provided by United Nations according to its standards including transport, testing, handling and administration unless the Level II or III contributing nations believe it necessary to negotiate this issue";

(i) Page 21, paragraph 7 of annex VIII, change "estimated useful life (years)"from 8 to 5;

(j) Pages 19, 21, 22, 24 of annex VIII, delete (lab included) for Level I;

(k) Page 24 of annex VIII, Table, GFMV for Level I should be changed to US$ 140,800 instead of US$ 163,600;

(l) To resolve the issue of double payment, the new system will only reimburse a country for the level of support they provide, not for multiple levels if other levels of support are provided by other countries.

87. The Phase V Working Group recommends that the General Assembly convene an expert group, in accordance with Section IV of the present report, to accomplish the following tasks:

(a) Review and specify the rates for medical support services self-sustainment, major equipment, wet lease factor and factor for no-fault incidents. This review must be conducted in light of the following considerations:

(i) The Phase V Working Group recommends that future medical support services self-sustainment rates be developed on a modular basis, to promote flexibility in the medical mission planning process. This modular approach would consist of the establishment of standards, rates and

equipment listings for each of Basic, Level I, Level II and Level III support. Separate standards and rate listings would be developed for each of: dental, blood, laboratory and high-risk (epidemiological) capabilities. When the United Nations requests that a country provide only the basic level of medical support, that country would only receive the rate assigned to the basic level. When the United Nations requests the country to provide, in addition to a basic level of medical support (i.e. Level I or II or III), one or more of these additional capacities, the country would be reimbursed for the requested level of support plus the rates applicable to the additional requested services (i.e. blood, dental, lab, high-risk).

(ii) Definition of major/minor equipment and consumables: For the purposes of annex VIII, the following definitions should apply in establishing medical material as being major equipment, minor equipment or consumables:

1. Major Equipment: Accountable equipment which has an original purchase cost of US$ 1,500 or more and a serviceable life of five years or more;

2. Minor equipment: Accountable equipment which does not meet the definition of major equipment provided above;

3. Consumable: Non-accountable medical supplies, which are consumed in the process of the provision of medical support;

4. On an operational basis, several items of minor equipment may be gathered in a single "capability" set. If the total values of such items equals or exceeds US$ 1,500, the capability set is considered as a major item; and

(iii) Vaccination cost review: The Working Group supports the practice currently in effect, as explained by Secretariat medical staff, whereby a country may be reimbursed for medical costs incurred in respect of repatriated peacekeeping personnel, where either the medical condition is diagnosed in-mission prior to redeployment or the country can establish, to the satisfaction of United Nations medical authorities, that the condition is directly attributable to service in a United Nations mission area. The Phase V Working Group supports the recommendation of the Special Committee on Peacekeeping Operations, in paragraph 110 of its 1999 report (A/54/87), in respect of a need to review the issue of pre-deployment immunization and post-repatriation medical examination costs for peacekeeping personnel. The Working Group recommends that the review focus on those extraordinary immunization and examination costs which a country would incur (i.e. those above and beyond the normal costs involved in maintaining national personnel in normal conditions of health). The Working Group urges the Secretariat to convene a meeting of appropriate experts from both Member States and the Secretariat, at the earliest possibility, to finalize its review of this issue. The Working Group further recommends that the Secretariat submit the results of its review directly to the General Assembly through the Advisory Committee on Administrative and Budgetary Questions and Fifth Committee for approval, possibly in the form of a supplement to the Phase V Working Group report.

(b) Annexes VIII.A to VIII.C contain lists of minor equipment in Level I that are grouped into kits. The Phase V Working Group recommends that the above-mentioned expert group takes a similar approach with respect to minor equipment in the Level II and Level III listings.

(c) Medical evacuation: The final approval for deployment of a medical evacuation capacity to a peacekeeping operation rests with the United Nations. Where a contributing country agrees to deploy an in-theatre evacuation capacity pursuant to a request from the United Nations, the following provisions should govern reimbursement. For evacuation by road, the cost of evacuation vehicles should be reimbursed under general major equipment provisions at the standard rates applicable to such equipment. Costs for the personnel involved in the medical evacuation capacity should be reimbursed under standard troop cost provisions. For evacuation by air, reimbursement for both the evacuation aircraft and specialist in-flight evacuation personnel should be under existing Letter of Assist arrangements between the United Nations and the troop contributors concerned.

V. Post Phase V Working Group

(Review of major equipment indices and self-sustainment averages)

88. With the submission and acceptance of the present report, Phases II, III, IV and V are completed except for the revision of the rates. In order to accomplish this task there exists a requirement for a Post Phase V Working Group.

89. Initially, the Phase V Working Group's mandate was to review the rates developed in 1995. The time available to the Phase V Working Group (24 -28 January 2000) did not permit the Working Group to develop new rates. The Member States had been asked to provide data without an appropriate format in determining a rate review. The lack of guidance, the Working Group believes, has made the determination of equitable rates at Phase V all the more difficult.

90. The Phase V Working Group has accomplished a significant achievement by determining a methodology for the revision of the rates in major equipment, petroleum, oil and lubricants (POL), self-sustainment and special cases for COE.

91. The aim of the Post Phase V Working Group is to validate the mechanism by which revised rates will be determined by the General Assembly to be included in the COE Manual.

92. The Phase V Working Group recommends that, upon the General Assembly's approval of its report, the General Assembly request the Secretariat to collect all relevant data and that the Secretary-General convene an open-ended Working Group to complete the mandate of the Phase V Working Group in January/February 2001. Furthermore, the Working Group recommended that the Post Phase V Working Group be given a minimum of 10 working days in which to complete their work. The Working Group should be open to all Member States.

93. The Phase V Working Group strongly encouraged all Member States wishing to participate in the Post Phase V Working Group to ensure that the appropriate expertise is represented in their delegation.

94. The Post Phase V Working Group should determine, with the assistance of the Secretariat, an appropriate average index to be applied to the existing major equipment and self-sustainment rates.

95. The Post Phase V Working Group should also provide the financial and technical expertise necessary to assist the Secretariat in assessing the information provided by the Member States. Annex I provides a detailed work programme.

96. The Working Group further recommended that the Secretariat build into its peacekeeping cost base the indices provided by the Member States so that the potential impact on peacekeeping budgets will be available to the Working Group. In addition, the Post Phase V Working Group should require the participation of the Secretariat, in applying appropriate adjustments and thus allowing due consideration of budgetary impacts by the open-ended Working Group.

VI. Closing remarks

97. As closing remarks, Mr. Young Jin Choi, Assistant Secretary-General, for the Department of Peacekeeping Operations, indicated that although the work of this Group had been difficult, considerable progress was made on developing a methodology and reviewing self-sustainment standards as well as medical support services. While the methodology may be subject to revisions, there now exists a basis on which to build on. The enhanced procedures, with regard to major equipment, self-sustainment and medical support services, will greatly facilitate the work of the Secretariat. It was important that the methodology for revising rates be clearly documented.

98. Mr. Choi reiterated that the basic underlying factors of the new system for reimbursement of contingent-owned equipment is to reduce the administrative burdens on troop contributors, the Secretariat and peacekeeping missions.

99. Mr. Choi added that the ability of Member States to self-sustain and the extent, to which such self-sustainment was provided, should reduce the level of direct support the United Nations had to mobilize. The need for equitable treatment of all Member States as regards to the level of support the United Nations must provide is very important. As an example, equipment and support capacities brought into a peacekeeping operation beyond the operational requirements as determined by the United Nations should be considered a national responsibility. If not, disparities in reimbursement for contingent-owned equipment, self-sustainment and medical support services will be experienced. The need to ensure reasonable standards for troop contributors was, within this context, of paramount importance.

100. The Chairman of the Phase V Working Group, Brigadier Muhammad Haroon Aslam, said in his closing

remarks that the current session of the Working Group introduced major improvements, which certainly will assist both the troop contributors and the United Nations in ensuring transparency and fairness in the reimbursement process and financial control and better auditing of the expenses. The adoption of the reimbursement rates for medical services, as proposed by the Secretariat, a methodology for future regular review of the rates and performance standards and a number of improvements to the definition of standards for major equipment and self-sustainment, were the major achievements of the Phase V Working Group. The Chairman also stressed the importance of collecting the needed national data on costing of COE before any gathering of Member States to adopt further improvements to the standards. The General Assembly, through the Advisory Committee on Administrative and Budgetary Questions and Fifth Committee, will receive a substantive report to assist all Member States of the United Nations in examining all the steps and further improvements to the new COE reimbursement procedures.

Annex I

Contingent-owned equipment — Triennial review

Nation A

Generic category	*Index per cent*
Communications equipment (Includes: VHF/UHF-FM transceivers and HF equipment)	
Satellite equipment	
Telephone equipment	
Airfield support equipment	
Miscellaneous	
Generators (stationary and mobile)	
Engineering	
Logistics equipment	
Demining equipment	
Medical and dental equipment	
Area equipment	
Personal equipment	
Accommodation equipment (Includes: semi-rigid and rigid structures)	
Containers	
Armaments	
Combat vehicles (Includes: tanks, armoured personnel carriers (tracked and wheeled), carrier-oversnow, reconnaissance (tracked and wheeled) and self-propelled artillery	
Support vehicles (commercial pattern)	
Support vehicles (military pattern; includes: pallet loading system)	
Communication vehicles	
Engineering vehicles	
Material handling equipment	
Aircraft support equipment	
Trailers	
Petroleum, oil and lubricants	

Note: Index above is to be determined by taking the GFMV from the last update (in national currency) from the GFMV of the last complete year of data (in national currency). For example (1995-1999), (1999-2002) and so forth.

Annex II

Contingent-owned equipment — Triennial review (consolidation)

Generic category	*Nation A*	*Nation B*	*Nation C*	*Nation D*	*Nation E*	*Nation F*	*Etc*	*Initial average*	*Adjustment*	*Adjusted average*
	Index per cent									
Communications equipment (Includes VHF/UHF-FM transceivers and HF equipment								**#DIV/0!**		
Satellite equipment								**#DIV/0!**		
Telephone equipment								**#DIV/0!**		
Airfield support equipment								**#DIV/0!**		
Miscellaneous								**#DIV/0!**		
Generators (stationary and mobile)								**#DIV/0!**		
Engineering								**#DIV/0!**		
Logistic equipment								**#DIV/0!**		
Demining equipment								**#DIV/0!**		
Medical and dental equipment								**#DIV/0!**		
Area equipment								**#DIV/0!**		
Personal equipment								**#DIV/0!**		
Accommodation equipment (Includes: semi-rigid and rigid structures)								**#DIV/0!**		
Containers								**#DIV/0!**		
Armaments								**#DIV/0!**		
Combat vehicles (Includes: tanks, armoured personnel carriers (tracked and wheeled), carrier-oversnow, reconnaissance (tracked and wheeled) and self-propelled artillery								**#DIV/0!**		
Support vehicles (commercial pattern)								**#DIV/0!**		
Support vehicles (military pattern; includes: pallet loading system)								**#DIV/0!**		
Communication vehicles								**#DIV/0!**		
Engineering vehicles								**#DIV/0!**		
Material handling equipment								**#DIV/0!**		
Airfield/aircraft support equipment								**#DIV/0!**		
Trailers								**#DIV/0!**		
Petroleum, oil and lubricants (POL)								**#DIV/0!**		

Annex III

Member States contingent-owned equipment costing

Annex III provides the formats for the cost data that Member States will be asked to provide for special cases and comprehensive reviews of major equipment reimbursement rates.

A. Special cases

Provides the cost data format for those pieces of special case equipment which Members States bring to the attention of the Secretariat. The Secretariat will provide special case equipment cost data cumulated over the triennial review.

B. Special Case Equipment — Data provided by the Secretariat

Illustration of the special case cost data from the period 1996-1997 is provided in annex III.B. (The Secretariat is also requested to provide data on the number of peacekeeping operations for which each item of special case equipment was used.)

C. Contingent-owned equipment (major equipment) comprehensive review

Provides the cost data to the Secretariat for a comprehensive review of major equipment reimbursement rates.

Notes:

For comprehensive review:

(1) Only required as advised by General Assembly or at least every 15 years.

(2) Comprehensive review revisits all assumptions, in particular the relationship between the generic fair market value (GFMV), maintenance and petroleum, oil and lubricants costs.

(3) GFMV should be based on best estimate of weighted average GFMV.

(4) Maintenance cost.

(5) Petroleum, oil and lubricants cost.

A. Contingent-owned equipment (special cases) data provided by the Secretariat

Member State

Category of equipment	*Current position US$ (COE Manual 1995)*	*National description*	*Usage type*	*Purchase price + upgrades (US$)*	*Price adjustment*	*Generic fair market value*	*National estimated useful life*	*Vehicles*		*Non-vehicle*
								Cost per km or hour (US$)		
								Maintenance	*POL*	*Maintenance*
(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*	*(g)*	*(h)*	*(i)*	*(j)*	*(k)*
Vehicles										
						-				
						-				
						-				
						-				
						-				
						-				
						-				
						-				
						-				
Logistic equipment										
						-				
						-				
						-				
						-				
						-				
						-				
						-				
						-				
						-				

B. Special case equipment data provided by the Secretariat

Item description	Submitted by Member State: No. assets	No. missions	Generic fair market value per item (US$)	Maintenance cost: Per item (US$)	Maintenance cost: %	Useful life	United Nations calculations: Generic fair market value per item (US$)	Useful life	Maintenance cost: Per item (US$)	Maintenance cost: %	No-fault incident factor: %	No-fault incident factor: Rate (US$)	Dry lease rate per item	Wet lease rate per item	Approved
Airfield support equipment															
Radar equipment															
Locator RSP-10 (set)			360 000	1 420	0.39	10	360 000	10	1 420	0.39	0.20	60.00	3 060	4 480	Yes
Special trailer RSP-10			40 000	60	0.15	20	40 000	20	60	0.15	0.20	6.67	173	233	Yes
Ground surveillance radar, United States Army PPS-15			30 000	10	0.03	30	30 000	30	10	0.03	0.20	5.00	88	98	Yes
Approach system/lighting															
SIL-130 Auto Station ARM-90			182 000	310	0.17	10	182 000	15	310	0.17	0.20	30.33	1 041	1 351	Yes
GAZ-66 Code light beacon KNS-4P			175 000	267	0.15	10	175 000	15	267	0.15	0.20	29.17	1 001	1 268	Yes
Control tower															
Radio station R-140R mounted on ZIL-131 truck			244 000	240	0.10	10	244 000	20	240	0.10	0.20	40.67	1 057	1 297	Yes
Command post SKP-11 mounted on ZIL-130 truck			195 000	500	0.26	10	195 000	20	500	0.26	0.20	32.50	845	1 345	Yes
Special trailer SKP-11			25 000	80	0.32	10	25 000	20	80	0.32	0.20	4.17	108	188	Yes
Forecast station INS-4P mounted on GAS-66 truck			164 000	360	0.22	10	164 000	20	360	0.22	0.20	27.33	711	1 071	Yes
Radio station R-845M mounted on GAS-66 truck			230 000	230	0.10	10	230 000	20	230	0.10	0.20	38.33	997	1 227	Yes
Radio station R-853-V1-00			7 500	50	0.67	10	7 500	20	50	0.67	0.20	1.25	33	83	Yes
Switchboard P-193M			1 050	15	1.43	10	1 050	20	15	1.43	0.20	0.18	5	20	Yes
Subtotal control tower			**866 550**		**0.00**		**866 550**							**5 230**	**Yes**
Navigation system															
Automatic radio direction finder ARP-11			228 000	480	0.21	10	228 000	10	480	0.21	0.20	38.00	1 938	2 418	Yes
Special trailer ARP-11			25 000	80	0.32	20	25 000	20	80	0.32	0.20	4.17	108	188	Yes
Non-directional beacon PAR-9M2			96 000	750	0.78	10	96 000	10	750	0.78	0.20	16.00	816	1 566	Yes
Special trailer PAR-9M2			23 500	80	0.34	20	23 500	20	80	0.34	0.20	3.92	102	182	Yes
Subtotal navigation system			**372 500**	**1 390**	**0.37**		**372 500**		**1 390**					**4 354**	**Yes**

Item description	Submitted by Member State: No assets	No. missions	Generic fair market value per item (US$)	Maintenance cost: Per item (US$)	Maintenance cost: %	Useful life	United Nations calculations: Generic fair market value per item (US$)	Useful life	Maintenance cost: Per item (US$)	Maintenance cost: %	No-fault incident factor: %	No-fault incident factor: Rate (US$)	Dry lease rate per item	Wet lease rate per item	Approved
Combat vehicles – tanks and armoured personnel carriers															
Tanks															
Tanks M48A5			900 000				900 000								Pending
Tanks (T-59M)			978 200	9 520	0.97	10	978 200	25	3 150	0.32	0.50	407.58	3 668	6 818	Yes
Tanks M60 A1			1 477 000	5 900	0.40	17	1 477 000	25	5 900	0.40	0.00	0.00	4 923	10 823	Yes
Tank M60 A3			2 000 000	3 420	0.17	25	1 600 000	25	3 924	0.25	0.50	666.67	2 743	6 667	Yes
Tanks M60 A3			2 000 000	3 420	0.17	25	1 600 000	25	3 924	0.25	0.50	666.67	2 743	6 667	Yes
Tank Steyr, SK 105			289 000	5 000	1.73	30	289 000	30	2 500	0.87	0.50	120.42	923	3 423	Yes
Tanks T-72			1 175 000	7 667	0.65	15	1 175 000	25	7 667	0.65	n/a	0.00	3 917	11 584	Yes
Tanks T-72K			1 250 000	7 975	0.64	15	1 250 000	25	7 975	0.64	n/a	0.00	4 167	12 142	Yes
Tanks T-72M1			1 412 000				1 412 000								Pending
Tank M88 A1 recovery			1 500 000	3 100	0.21	25	850 000	25	3 122	0.37	0.50	354.17	2 872	5 994	Yes
Tanks, launch bridge															
Tank launch bridge T-55MT			950 000	5 914	0.62	20	950 000	25	5 914	0.62	0.50	395.83	3 563	9 477	Yes
Tanks, mine clearing															
Tank mine clearing T-55C			850 500	5 288	0.62	20	850 500	25	5 288	0.62	0.50	354.38	3 189	8 477	Yes
Tanks, recovery															
Tank recovery ARV W653			953 000	9 408	0.99	10	953 000	25	3 100	0.33	0.50	397.08	3 574	6 674	Yes
Tank recovery BREM-1 (T-72 chassis)			750 000	6 175	0.82	15	750 000	25	6 175	0.82	n/a	0.00	2 500	8 675	Yes
Tanks recovery Leopard Rescue			2 200 000	8 900	0.40	17	2 200 000	25	8 900	0.40	0.00	0.00	7 333	16 233	Yes
Tanks – recovery T-55A ZS			850 500	5 288	0.62	20	850 500	25	5 288	0.62	0.50	354.38	3 189	8 477	Yes
Tanks – recovery T-55VT			850 500	5 288	0.62	20	850 500	25	5 288	0.62	0.50	354.38	3 189	8 477	Yes
Tanks M88A1 recovery			900 000				900 000								Pending
Tanks M88 A1 (tank recovery)			1 500 000	3 100	0.21	25	850 000	25	3 122	0.37	0.50	354.17	2 872	5 994	Yes
Tanks, engineer vehicle															
Tanks – Engineer Leopard Pioneer			2 693 000	10 800	0.40	17	2 693 000	25	10 800	0.40	0.00	0.00	8 977	19 777	Yes
Armoured infantry fighting vehicle															
Armoured infantry fighting vehicle			713 379	4 342	0.61	25	713 379	25	4 342	0.61	0.50	297.24	2 675	7 017	Yes

	Submitted by Member State						United Nations calculations								
				Maintenance cost					Maintenance cost		No-fault incident factor				
Item description	No. assets	No. missions	Generic fair market value per item (US$)	Per item (US$)	%	Useful life	Generic fair market value per item (US$)	Useful life	Per item (US$)	%	%	Rate (US$)	Dry lease rate per item	Wet lease rate per item	Approved
Reconnaissance vehicle - wheeled over 100 mm															
Reconnaissance vehicle wheeled > 100 mm, Centauro Tanks			2 750 000	17 300	0.63	17	2 750 000	25	17 300	0.63	0.00	0.00	9 167	22 917	Yes
Demining equipment															
Remote controlled demining equipment															
Remote controlled demining equipment Bozena			240 000	1 800	0.75	4	240 000	4	1 800	0.75	0.80	160.00	5 160	6 960	Yes
Mine detectors															
BMR combat mine detector			625 000				625 000	12	3 430	0.55	0.50	260.42	4 601	8 031	Pending
DIM-M road mine detector			38 000				38 000	6	275	0.72	0.50	15.83	544	819	Pending
Mine detector			204 393	81	0.04	10	59 705	10	635	1.06	0.10	4 98	1 323	1 958	Yes
Mine detector 2			4 000	4	0.10	2	4 000	5	4	0.10	0.10	0.33	67	71	Yes
Mine detector, Schiebel AN 19/2			6 844	48	0.70	3	6 844	5	48	0.70	0.10	0.57	115	163	Yes
Protective clothing															
Bomb suit			7 125	75	1.05	3	7 125	5	75	1.05	0.10	0.59	119	194	Yes
Mine shoes			500	6	1.25	1	500	1	6	1.25	0.10	0.04	42	48	Yes
Shrapnel protective vests and trousers			625	0	0.06	1	625	1	0	0.06	0.10	0.05	52	53	Yes
Shrapnel shield			1 375	18	1.27	1	1 375	1	18	1.27	0.10	0.11	115	132	Yes
Bomb locator															
Bomb locator 5			5 000	8	0.16	5	5 000	5	8	0.16	0.10	0.42	84	92	Yes
Bomb locator set			34 806	515	1.48	8	21 170	8	224	1.06	0.10	1.76	237	461	Yes
Dogs															
Mine clearing dogs			25 000	665	2.66	5	25 000	5	665	2.66	0.10	2.08	419	1 084	Yes
Others															
Digital camera			2 250	55	2.44	2	2 250	2	55	2.44	0.10	0.19	94	149	Yes
Ultrasounder			1 875	63	3.33	5	1 875	5	63	3.33	0.10	0.16	31	94	Yes
Armament															
Gun M-46 (130 mm)			902 353	4 511	0.50	7	902 353	25	4 511	0.50	0.50	375 98	3 384	7 895	Yes
Mortar fire control			350 000	700	0.20	10	150 000	10	250	0.17	0.80	100.00	1 250	1 600	Yes
Gun tow (Mercedes 2028A)			284 700	2 847	1 00	16	284 700	16	1 093	0.38	0.80	189.80	1 673	2 766	Yes
Recoilless gun			3 100	13	0.42	25	3 100	25	13	0.42	0.50	1 29	12	25	Yes

Item description	Submitted by Member State: No. assets	No. missions	Generic fair market value per item (US$)	Maintenance cost: Per item (US$)	Maintenance cost: %	Useful life	United Nations calculations: Generic fair market value per item (US$)	Useful life	Maintenance cost: Per item (US$)	Maintenance cost: %	No-fault incident factor: %	No-fault incident factor: Rate (US$)	Dry lease rate per item	Wet lease rate per item	Approved
12 calibre shotgun 11-87			1 000	7	0.67	5	1 000	5	7	0.67	0 10	0.08	17	23	Yes
12.7 mm riflegun AG90			6 000	44	0.73	5	6 000	5	44	0 73	0.10	0 50	101	144	Yes
Anti-armour missile															
Anti-armour MILAN (launcher only)			108 000	417	0.39	25	27 298	25	250	0.92	0.00	0.00	91	341	Yes
Anti-armour MILAN (firing post) (launcher only)			27 298	250	0.92	25	27 298	25	250	0.92	0 50	11.37	102	352	Yes
Anti-tank weapon system TF-8			143 619	1 148	0.80	?	143 619	25	1 148	0.80	0.50	59.84	539	1 687	Yes
Launching mechanism 9P516,9P (9m39)			16 000	24	0.15	10	16 000	10	24	0.15	0 50	6.67	140	164	Yes
Launching mechanism 9P-A-TK (9P135m)			85 000	42	0.05	20	85 000	20	42	0.05	0.50	35.42	390	432	Yes
Truck GAZ-66 anti-missile station 9V866			550 000	546	0.10	20	550 000	20	546	0.10	0 50	229 17	2 521	3 067	Yes
Truck GAZ-66 anti-missile station 9V817			350 000	546	0.16	20	350 000	20	546	0.16	0 50	145.83	1 604	2 150	Yes
Anti-tank grenade launcher			2 050	10	0.49	25	2 050	25	10	0.49	0.50	0.85	8	18	Yes
Heavy engineering equipment															
Bridging															
TMM-3M heavy mechanized bridge set			2 184 000				2 184 000	12	16 375	0 75	0.50	910.00	16 077	32 452	Pending
Pontoons/pontoon bridge															
Pontoon bridge park															
KRAZ-225B special truck (QTY: 19 at $172,000)			3 268 000				3 268 000	15							Pending
River pontoon unit (QTY: 32 at $39,600)			1 267 200				1 267 200	12							Pending
Bank pontoon unit (QTY: 4 at $43,800)			175 200				175 200	12							Pending
Paver (QTY: 1 at $33,600)			33 600				33 600	12							Pending
BMK – 130L boat (QTY: 12 at $65,100)			781 200				781 200	12							Pending
Subtotal pontoon bridge park			**5 525 200**	**27 850**		**12**	**5 525 200**	**15**	**8 200**	**0.15**	**0.10**	**460.43**	**31 156**	**39 356**	**Pending**
Engineering vehicles															
Crane mobile heavy (over 24 tons)															
Truck crane (over 24t) TATRA 815 AD-28			250 000	380	0.15	20	250 000	20	380	0.15	0 80	166 67	1 208	1 588	Yes

Item description	Submitted by Member State: No. assets	No. missions	Generic fair market value per item (US$)	Maintenance cost: Per item (US$)	Maintenance cost: %	Useful life	United Nations calculations: Generic fair market value per item (US$)	Useful life	Maintenance cost: Per item (US$)	Maintenance cost: %	No-fault incident factor: %	No-fault incident factor: Rate (US$)	Dry lease rate per item	Wet lease rate per item	Approved
Heavy mobile crane (over 24 tons)			170 000												Pending
Special vehicles															
PTS-M special vehicle			470 000				470 000	12	6 560	1.40	0.50	195.83	3 460	10 020	Pending
BAT-M road layer			202 500				202 500	12	3 470	1.71	0.50	84.38	1 491	4 961	Pending
Set of MRIV main station ZIL-131			185 000				185 000	20	750	0.41	0.50	77.08	848	1 598	Pending
Support vehicles (military pattern)															
Truck cargo			30 000	100	0.33	5	30 000	5	100	0.33	0.80	20.00	520	640	Yes
Logistics equipment															
Water tanks/bladders/blivets															
Water bladder, 20,000 gallons			6 450	200	3.10	5	6 450	5	13	0.20	0.50	2.69	110	123	Yes
Water tank, 15,000 gallons			13 000	300	2.31	10-15	13 000	15	26	0.20	0.50	5.42	78	104	Yes
Water blivet, 500 gallons			2 281	200	8.77	5-10	2 281	10	5	0.20	0.50	0.95	20	25	Yes
Water equipment															
Water purification portable (500 litres/h)			24 666	2 333		7									Pending
Set UDV-15 water drilling st.			15 000				15 000	10	300	2.00	0.50	6.25	131	431	Pending
Fuel tanks/bladders/blivets															
Fuel tank (10,000 litres)			22 000	81		10									Pending
Fuel blivet, 500 gallons			2 281	200	8.77	5-10	2 281	10	5	0.20	0.50	0.95	20	25	Yes
Fuel equipment															
Fuel quality inspection lab			17 000	25	0.15	3	17 000	3	25	0.15	0.10	1.42	474	500	Yes
Heater system															
A.C CAP 24-29 BTUH (7.0-8.5KW) Howden AC120			16 230	169	1.04	2	16 230	5	169	1.04	0.10	1.35	272	441	Yes
Tent heater mobile CAP 150 BTUH (45) KW Dantherm VA-M40			17 111	178	1.04	2	17 111	4	178	1.04	0.10	1.43	358	536	Yes
Tent heater CAP 16 W			4 009	42	1.05	2	4 009	4	42	1.05	0.10	0.33	84	126	Yes
Shower and hot water system			83 697	400	0.48	4	83 697	10	400	0.48	0.10	6.97	704	1 104	Yes
Electrical equipment															
Voltage stabilizer 1.5 KVA GlaudelYon. LVC-800			1 882	20	1.06	2	1 882	5	20	1.06	0.10	0.16	32	52	Yes

Item description	Submitted by Member State						United Nations calculations								
	No. assets	No. missions	Generic fair market value per item (US$)	Maintenance cost: Per item (US$)	Maintenance cost: %	Useful life	Generic fair market value per item (US$)	Useful life	Maintenance cost: Per item (US$)	Maintenance cost: %	No-fault incident factor: %	No-fault incident factor: Rate (US$)	Dry lease rate per item	Wet lease rate per item	Approved
Engineering equipment															
Block making machine			4 500	75	1.67	5	4 500	5	68	1.50	0.10	0.38	75	143	Yes
Concrete mixer			6 500	54	0.83	10	1 588	8	32	2.00	0.10	0.13	17	48	Yes
Ditching machine			50 500	280	0.55	12	50 500	12	280	0.55	0.10	4.21	355	635	Yes
Geodetical set			12 500	10	0.08	8	12 500	20	10	0.08	0.10	1.04	53	63	Yes
Nivelisation set			5 150	5	0.10	8	5 150	8	5	0.10	0.10	0.43	54	59	Yes
Sawmill mobile GKT-60			50 000	200	0.40	8	50 000	15	200	0.40	0.10	4.17	282	482	Yes
Others															
Set of VFS-1, 5 filter station			170 400				170 400	10	1 545	0.91	0.50	71.00	1 491	3 036	Pending
Strong box fire proof safe			3 470	36	1.04	2	3 470	20	36	1.04	0.10	0.29	15	51	Yes
Tactical fast roping system			436	5	1.15	10	436	10	5	1.15	0.50	0.18	4	9	Yes

C. Contingent-owned equipment (major equipment) comprehensive review

Member State

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km. or hour (US$): Maintenance	Vehicles: Cost per km. or hour (US$): POL	Non-vehicle: Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Communications equipment										
VHF/UHF – FM transceivers										
Air-ground base station transceivers AM/FM	30 000					-				
Microwave links	73 000					-				
Mobile stations for trunking systems	500					-				
Paging equipment	2 000					-				
Portable hand-held radio for trunking	2 000					-				
Repeaters	3 100					-				
VHF alarm units	2 000					-				
VHF multiplex channels	49 500					-				
High frequency equipment										
Antennas, log periodic – directional high power	22 500					-				
Base receiver, high frequency high power	7 500					-				
Base station transmitter, high frequency high power	20 000					-				
Phone patch interlink	Special case					-				
Satellite equipment										
Earth station – non-redundant	Special case					-				
Earth station – redundant	Special case					-				
Earth station hub	Special case					-				
Earth station – sub-hub	Special case					-				
INMARSAT type A – portable earth station	41 500					-				
INMARSAT type B – portable earth station	18 500					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km or hour (US$) Maintenance	Vehicles: Cost per km or hour (US$) POL	Non-vehicle Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
INMARSAT type C – portable earth station	13 000					-				
Satellite receivers/television receive only	150 000					-				
UPS satellite station	500					-				
VSAT earth station, global TX/RX	200 000					-				
Telephone equipment										
Telephone exchange large, 1-1,100 lines	400 000					-				
Telephone exchange PABX 1-100 lines	65 000					-				
Cryptofax	3 200					-				
Cyphering equipment	Special case					-				
Airfield support equipment										
Radar	1 008 000					-				
Approach systems/lighting	Special case					-				
Control tower	4 200 000					-				
Navigation systems	1 869 000					-				
Miscellaneous										
Underwater communications systems	Special case					-				
Antenna towers	5 000					-				
UPS 10 kVA and up	8 000									
Electrical										
Generators – stationary and mobile										
20 kVA to 30 kVA	36 400					-				
31 kVA to 40 kVA	40 000					-				
41 kVA to 50 kVA	54 000					-				
51 kVA to 75 kVA	64 000					-				
76 kVA to 100 kVA	72 000					-				
101 kVA to 150 kVA	80 000					-				
151 kVA to 200 kVA	100 000					-				
201 kVA to 500 kVA	152 000					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km or hour (US$) Maintenance	Vehicles: Cost per km or hour (US$) POL	Non-vehicle Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Greater than 500 kVA	Special case									
Engineering										
Assault boat and motor (Zodiac type)	14 000					-				
Bridging (Bailey or equivalent)	400 000					-				
Well drilling rig	381 000					-				
Quarry equipment, complete	Special case					-				
Recce boats	29 000					-				
Sewage treatment plant and equipment	35 000					-				
Bridging boat	159 000					-				
Water treatment plant, equipment, tanks and bladders	85 000					-				
Pontoons/pontoon bridge (interior/ramp section)	400 000					-				
Ferry boats (River crossing)	588 000					-				
Scissor/cantilever type bridge (up to 20 m)	90 200					-				
Logistic equipment										
Fuel farms (pumps, pipelines, tanks, bladders)	32 000					-				
Demining equipment										
Remote controlled bomb disposal equipment	Special case					-				
Medical and dental										
Dental unit	Special case					-				
Dispensary set	Special case					-				
Oxygen equipment	Special case					-				
100 bed field hospital and equipment	Special case					-				
Laboratory equipment	Special case					-				
Sterilizing	Special case					-				
Surgical theatre and unit	Special case					-				
X-ray machine	Special case					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km or hour (US$) Maintenance	Vehicles: Cost per km or hour (US$) POL	Non-vehicle Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Refrigeration, blood products	Special case					-				
Anaesthesia equipment	Special case					-				
Observation equipment										
Area equipment										
Artillery locating equipment	Special case					-				
Ground surveillance radar/system	Special case					-				
Thermal imaging systems – aerial version	120 000					-				
Thermal imaging systems – ground version	100 000					-				
Personal equipment										
Night observation devices – tripod mounted	12 000					-				
Binoculars – tripod mounted	7 500					-				
Accommodation equipment										
Semi-rigid structures										
Camp unit, medium (50 man)	30 000					-				
Camp unit, large (150 man)	600 000					-				
Maintenance workshop	30 000					-				
Office, communication and command posts	30 000					-				
Warehousing and storage	30 000					-				
Rigid structures										
Camp unit, small (5 man)	5 000					-				
Camp unit, medium (50 man)	75 000					-				
Camp unit, large (150 man)	315 000					-				
Office, communication and command posts	19 000					-				
Ablution facilities (man)	9 100					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km. or hour (US$)		Non-vehicle
								Maintenance	POL	Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Containers										
Medical	Special case					-				
Dental	Special case					-				
Workshop	57 000					-				
Refrigeration/freezer/food storage	30 000					-				
Insulated storage	46 000					-				
Ammunition storage	22 400					-				
Communications and command posts	146 000					-				
Other containers	7 200					-				
Aircraft										
All aircraft will be treated as	Special case					-				
Armaments										
Crew served machine guns (up to 10 mm)	7 600					-				
Crew served machine guns (11 to 15 mm)	13 000					-				
Mortars (up to 60 mm)	2 000					-				
Mortars (61 mm to 82 mm)	10 000					-				
Mortars (83 mm to 122 mm)	18 000					-				
Recoilless gun	15 000					-				
Anti-air weapons	Special case					-				
Anti-air missile	Special case					-				
Anti-armour missile	Special case					-				
Howitzer light towed	Special case					-				
Howitzer medium towed	Special case					-				
Naval vessels										
All naval vessels will be treated as	Special case									

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km or hour (US$)		Non-vehicle
								Maintenance	POL	Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Vehicles										
Combat vehicles										
Tanks – remaining (e.g.: less new special cases above)	Special case					-				
Tanks, launch bridge	Special case					-				
Tanks, mine clearing	Special case					-				
Tanks, recovery	Special case					-				
Tanks, engineer vehicle	Special case					-				
Armoured infantry fighting/airborne/ special	Special case					-				
Armoured personnel carriers – tracked										
Infantry carrier – unarmed/dozer	538 750					-				
Infantry carrier – armed	554 313					-				
Missile equipped	987 000					-				
Mortar	554 313					-				
Recovery	776 438					-				
Air defence	Special case					-				
Command post	927 938					-				
Air liaison office/forward air control/ artillery	Special case					-				
Radar	Special case					-				
Ambulance/rescue	618 625					-				
Cargo	505 000					-				
Armoured personnel carriers – wheeled										
Infantry carrier – unarmed/dozer	505 000					-				
Infantry carrier – armed	554 313					-				
Missile equipped	940 000					-				
Mortar	517 000					-				
Recovery	568 125					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km. or hour (US$)		Non-vehicle
								Maintenance	POL	Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Air defence	**Special case**					-				
Command post	**694 375**					-				
Air liaison office/forward air control/ artillery	**Special case**					-				
Radar	**Special case**					-				
Ambulance/rescue	**505 000**					-				
Carrier – oversnow										
Infantry carrier	**160 000**					-				
Infantry carrier – armoured	**251 000**					-				
General purpose (snowcat)	**36 900**					-				
Missile equipped	**660 000**					-				
Command post	**214 000**					-				
Reconnaissance vehicle – tracked	**255 000**					-				
Reconnaissance vehicle – wheeled up to 25 mm	**251 000**					-				
Reconnaissance vehicle – wheeled over 25 mm	**350 000**					-				
Reconnaissance vehicle – wheeled over 50 mm	**622 250**					-				
Reconnaissance vehicle – wheeled over 100 mm	**Special case**					-				
Self-propelled artillery	**Special case**					-				
Light howitzer	**900 000**					-				
Medium howitzer	**1 000 000**					-				
Heavy howitzer	**Special case**					-				
Support vehicles (commercial pattern)										
All-terrain vehicle	6 000					-				
Ambulance – truck	48 000					-				
Ambulance – armoured/rescue	150 000					-				
Ambulance (4 x 4)	66 000					-				
Automobile, sedan, station wagon	10 000					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km or hour (US$)		Non-vehicle
								Maintenance	POL	Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Automobile (4 x 4)	**14 000**					-				
Buses (12 PAX and less)	**24 000**					-				
Buses (13-24 PAX)	**35 000**					-				
Buses (greater than 24 PAX)	**120 000**					-				
Snow mobile	**6 000**					-				
Motorcycles	**3 000**					-				
Truck utility/cargo (under 1.5 ton)	**17 000**					-				
Truck utility/cargo (under 1.5 to 2.4 ton)	**25 000**					-				
Truck utility/cargo (2.5 to 5 ton)	**40 000**					-				
Truck utility/cargo (6 to 10 ton)	**70 000**					-				
Truck utility/cargo (over 10 ton)	**120 000**					-				
Truck pallet loading	**53 000**					-				
Truck maintenance light	**45 000**					-				
Truck maintenance medium	**75 000**					-				
Truck maintenance heavy	**220 000**					-				
Truck water	**80 000**					-				
Truck, crane, up to 10 tons	**128 000**					-				
Truck, crane heavy lift, up to 25 tons	**176 000**					-				
Truck, recovery 5 tons	**126 000**					-				
Truck, refrigerator	**53 500**					-				
Truck, tanker (up to 10,000 litres)	**90 000**					-				
Truck, tanker (over 10,000 litres)	**145 000**					-				
Truck, tractor	**90 000**					-				
Truck, tractor heavy (over 50 ton cap)	**160 000**					-				
Support vehicles (military pattern)										
Motorcycles	8 000					-				
Ambulance	80 000					-				
Jeep (4 x 4) with military radio	35 000					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km. or hour (US$)		Non-vehicle
								Maintenance	POL	Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Truck utility/cargo (jeep type under 1.5 ton)	30 000					-				
Truck utility/cargo (1.5 to 2.4 ton)	42 000					-				
Truck utility/cargo (2.5 to 5 ton)	67 000					-				
Truck utility/cargo (6 to 10 tons)	120 000					-				
Truck utility/cargo (over 10 tons)	152 000					-				
Truck maintenance light	75 000					-				
Truck maintenance medium	100 000					-				
Truck maintenance heavy	251 000					-				
Truck water	158 000					-				
Truck, crane (up to 10 tons)	120 000					-				
Truck, crane (10 to 24 tons)	200 000					-				
Truck, crane (over 24 tons)	Special case					-				
Truck, recovery, 5 tons	132 000					-				
Truck, recovery, greater than 5 tons	350 000					-				
Truck, refrigerator	100 000					-				
Truck, tanker (up to 10,000 litres)	110 000					-				
Truck, tanker (over 10,000 litres)	196 000					-				
Truck, tractor, up to 40 ton tow	112 000					-				
Truck, tractor, 41 to 60 ton tow	137 000					-				
Truck, tractor, over 60 ton tow	Special case					-				
Communications vehicles										
Truck, communications light	45 000					-				
Truck, communications medium	Special case					-				
Truck, communications heavy	Special case					-				
Trailer communications suite	Special case					-				
Mobile trunking system	Special case					-				
Air liaison office/forward air control/ tactical air control parts/wheeled	Special case					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km or hour (US$)		Non-vehicle
								Maintenance	POL	Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Engineering vehicles										
Armoured personnel carriers – tracked – engineer	650 000					-				
Bulldozer light (D4 and 5)	47 000					-				
Bulldozer medium (D6 and 7)	132 000					-				
Bulldozer heavy (D8A)	253 000					-				
Crane mobile light (up to 10 tons)	116 000					-				
Crane mobile light (10 to 24 tons)	215 000					-				
Crane mobile light (over 24 tons)	Special case					-				
Fire fighting truck	155 000					-				
Front end loader light (1<cu m)	55 000					-				
Front end loader medium (1-2 cu m)	80 000					-				
Front end loader heavy (2-4 cu m)	160 000					-				
Front end loader tracked	153 000					-				
Front end loader special (over 4 cu m)	Special case					-				
Grader, general purpose	125 000					-				
Grader, special purpose	Special case					-				
Mine clearance system – vehicle mounted	Special case					-				
Roller, self-propelled	95 000					-				
Roller, towed	33 000					-				
Road sweeper	90 000					-				
Sawmill, mobile	Special case					-				
Snowblower, truck	180 000					-				
Industrial tractor light	40 000					-				
Truck, dump, up to 10 cu m (civilian pattern)	50 000					-				
Truck, dump, up to 10 cu m (military pattern)	141 000					-				
Truck, dump, large (over 10 cu m)	215 000					-				
Truck, folding pontoon bridge	150 000					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km. or hour (US$) Maintenance	Vehicles: Cost per km. or hour (US$) POL	Non-vehicle Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Truck, launched bridge (scissor type)	90 000					-				
M2 rig, pontoon bridge	Special case					-				
Truck, pile driver	45 000					-				
Truck, drill rig	60 000					-				
Drill rig, self-propelled	200 000					-				
Truck sewer cleaner	120 000					-				
Excavator (up to 1 cu m)	90 000					-				
Excavator (above 1 cu m)	265 000					-				
Workshops, truck, heavy engineer equipment	110 000					-				
Material handling equipment										
Forklift light (up to 1.5 tons)	27 000					-				
Forklift medium (up to 5 tons)	51 000					-				
Forklift heavy (over 5 tons)	90 000					-				
Forklift, container	323 000					-				
Container lifter, self-propelled	110 000					-				
Forklift rough terrain (up to 1.5 tons)	79 000					-				
Forklift rough terrain (up to 5 tons)	117 000					-				
Forklift rough terrain (over 5 tons)	163 000					-				
Aircraft/airfield support equipment										
Truck A/C refuelling	110 400					-				
Forklift aircraft unloading	61 000					-				
Fire fighting, crash and rescue light	210 000					-				
Aircraft loading vehicle	135 000					-				
Semi-trailer A/C refuelling	55 000					-				
Trailer aircraft loading	9 000					-				
Runway sweeper	272 000					-				
Truck aircraft stairs	55 000					-				
Tractor A/C towing	100 000					-				
Auxiliary power unit (small capacity)	88 000					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km or hour (US$)		Non-vehicle
								Maintenance	POL	Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Auxiliary power unit (large capacity)	250 000					-				
Truck de-icing	201 600					-				
Truck food servicing	98 000					-				
Snowplow	99 000					-				
Snowblower	200 000					-				
Trailers										
Light cargo single axle	4 500					-				
Medium cargo single axle	10 000					-				
Light cargo multi axle	15 500					-				
Medium cargo multi axle	19 000					-				
Heavy cargo multi axle	28 000					-				
Heavy cargo (20 tons)	59 000					-				
Water trailer (up to 2,000 litres)	13 550					-				
Water trailer (2,000 to 7,000 litres)	18 000					-				
Water trailer (over 7,000 litres)	20 000					-				
Fuel trailer (up to 2,000 litres)	19 500					-				
Fuel trailer (2,000 to 7,000 litres)	35 000					-				
Fuel trailer (over 7,000 litres)	60 000					-				
Compressor trailer	47 250					-				
Servicing trailer	13 500					-				
Flatbed up to 20 ton	25 000					-				
Flatbed over 20 ton	32 000					-				
Lowbed up to 20 ton	45 000					-				
Lowbed 20 to 40 ton	57 000					-				
Heavy equipment/tank transporter	280 000					-				
Semi-trailer refuelling	50 000					-				
Semi-trailer water	46 139					-				
Semi-trailer refrigerator	52 000					-				

Category of equipment	Current position (US$) (COE Manual 1995)	National description	Usage type	Purchase price plus upgrades (US$)	Price adjustment	Generic fair market value	National estimated useful life	Vehicles: Cost per km or hour (US$) Maintenance	Vehicles: Cost per km or hour (US$) POL	Non-vehicle Maintenance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Semi-trailer van	30 000					-				
Mine clearance system trailer mounted	Special case					-				
Bridging system	Special case					-				
Trackway surfacing outfit	57 867					-				
Pallet loading system	4 986					-				

Columns:

(d) Usage type (hours or km)

(e) Purchase price plus upgrades in US$

(f) Inflation rate to bring the generic fair market value (GFMV) up to current year

(g) GFMV = [D * (1 + E)] {carries to dry lease methodology and maintenance methodology pages}

(h) National estimated useful life

(i) National maintenance cost excluding labour charges (in US$) {carries to maintenance methodology page}

(j) National POL cost (in United States dollars) {carries to POL methodology page}

Annex IV

Consolidation format for comprehensive review of major equipment rates

The costing spreadsheet to determine the United Nations contingent-owned equipment rates for vehicles is organized into several sheets. The results of one sheet flow into the following sheets as follows.

A. Troop-contributor Nation sheets

There is a sheet for each troop-contributor nation where their national data is entered. Each sheet is named "troop-contributor nation-countryname". The data in the sheets flow to the dry lease sheet, the maintenance sheet and the POL Sheet where calculations are made to determine an overall COE rate.

B. Dry lease

The generic fair market value (GFMV) information from each troop-contributor nation sheet flows into this Dry Lease Sheet. An international average is then calculated. This average then flows to the maintenance sheet and the summary sheet.

C. Maintenance cost format

The GFMV and maintenance information from each troop-contributor nation sheet flow into this maintenance sheet. The troop-contributor nations' costs are averaged and then a COE maintenance rate is calculated. The final figures on this sheet flow to the summary sheet.

Petroleum, oil and lubricants cost format

The petroleum, oil and lubricants (POL) information from each troop-contributor nation sheet flows into this POL Sheet. The troop-contributor nations' costs are averaged but no further calculations are performed. The average figures on this sheet flow to the summary sheet.

Summary

The rates developed on the dry lease sheet, the maintenance sheet and the POL sheet flow into this summary sheet without any further calculations. This sheet shows the final COE rates for inclusion into the United Nations COE Manual.

A. Troop-contributor nation sheets

COE Eqpt sub-category	*Usage type*	*Purchase price and upgrades*	*Inflation*	*Inflation adjustment*	*Generic fair market value ($US)*	*Cost per km or hour ($US)*		
						Spares	*Repair and overhaul*	*Petroleum, oil and lubricants*
A	B	C	D	E	F	G	H	I
Combat vehicles								
Tank, main battle tank — heavy								
Tank, main battle tank — medium								
Tank, recovery — heavy								
Tank, recovery — medium								
Tank, all other types		Special case						
Armoured personnel carriers — tracked								
Infantry carrier — unarmed/dozer	KM	450 000	0.2625	1.5	528 750	4.04	6.08	1.50
Infantry carrier — armed	KM		0.2625	1.5				
Missile equipped	KM		0.2625	1.5				
Mortar	KM		0.2625	1.5				
Recovery	KM		0.2625	1.5				
Air-defence		Special case						
Command post	KM	735 000	0.2625	1.5	863 625	15.04	9.68	1.50

Columns:

B. Usage type (hrs or km.)

C. Purchase price plus upgrades in $US

D. Inflation rate to bring GFMV up to current year

E. Adjustment to make one country's costs more representative to the costs of several nations

F. Adjusted GFMV = [C * (1 + D)/E] (carries to dry lease methodology and maintenance methodology pages)

G. National spares cost (in $US) (carries to maintenance methodology page)

H. National third line maintenance cost excluding labour charges (in $US) (carries to maintenance methodology page)

I. National POL cost (in $US) (carries to POL methodology page)

ALO/FAC/Arty		Special case						
Radar		Special case						
Ambulance/rescue	KM	490 000	0.2625	1.5	575 750	4.72	6.68	1.50
Cargo	KM	400 000	0.2625	1.5	470 000	4.72	6.68	1.50
Armoured personnel carriers — wheeled								
Infantry carrier — unarmed	KM	400 000	0.2625	1.5	470 000	1.34	3.48	0.75
Infantry carrier — armed	KM	490 000	0.2625	1.5	575 750	1.64	4.08	0.75
Missile equipped	KM	800 000	0.2625	1.5	940 000	5.24	7.68	0.75
Mortar	KM	440 000	0.2625	1.5	517 000	1.64	4.08	0.75
Recovery	KM	450 000	0.2625	1.5	528 750	1.64	4.08	0.75
Air-defence		Special case						
Command post	KM	550 000	0.2625	1.5	646 250	4.99	6.78	0.75
Air liaison office/Forward air control/ artillery		Special case						
Radar		Special case						

COE Eqpt sub-category	Usage type	Purchase price and upgrades	Inflation	Inflation adjustment	Generic fair market value ($US)	Cost per km or hour ($US)		
						Spares	Repair and overhaul	Petroleum, oil and lubricants
A	B	C	D	E	F	G	H	I
Ambulance/rescue	KM	400 000	0.2625	1.5	470 000	1.64	3.88	0.75
Carrier — oversnow								
Infantry carrier	KM	160 000	0	1	160 000	4.79	3.88	0.30
Infantry carrier — armoured	KM	251 000	0	1	251 000	6.79	5.63	0.75
General purpose (snowcat)	HR	36 900	0	1	36 900	6.02	6.04	1.22
Missile equipped	KM	660 000	0	1	660 000	14.54	7.68	0.30
Command post	KM	214 000	0	1	214 000	6.79	5.83	0.30
Reconnaissance vehicle — tracked	KM	255 000	0	1	255 000	4.72	6.68	1.25

B. Dry lease (Generic fair market value)

Contingent-owned equipment category	Generic fair market value (US$)					Initial average	Adjust	Adjusted average	Useful life (years)	No fault incident factor	Final monthly dry lease
	Country 1	Country 2	Country 3	Country 4	Country 5						
A	B	C	D	E	F	G	H	I	J	K	L
Combat vehicles											
Tank, main battle tank — heavy											
Tank, main battle tank — medium											
Tank, recovery — heavy											
Tank, recovery — medium											
Tank, all other types	Special case										
Armoured personnel carriers — tracked											
Infantry carrier — unarmed/dozer	528 750	589 950	Discarded	300 000	567 000	496 425	70%	347 498	25	0.5%	1 303
Infantry carrier — armed									25	0.5%	-
Missile equipped									15	0.5%	-
Mortar									25	0.5%	-
Recovery									25	0.5%	-
Air-defence	Special case										
Command post	863 625	500 000	337 000	700 000	No data	600 156	100%	600 156	25	0.3%	2 151

Columns:

B-F National GFMV values come from troop contributor worksheets.
G Sums all countries and divides by number of countries with value greater than zero.
H Adjustment factor to prevent excessive price increase.
I Adjusted average.
J Useful life information.
K No fault incident factor.
L (Average GFMV/useful life/12) + (Average GFMV/12 months x no fault incident factor) = [(I/J/12)+(I/12*K)] {values carry forward to summary page}.

For item L, the no fault incident factor assumes that the troop-contributing nation will lose at least one vehicle per year, hence it takes the entire value of the equipment divided by 12 months rather than dividing by the useful life first.

C. Maintenance cost format

Contingent-owned equipment category	*Generic fair market value*	*Maintenance cost per km (or hour) in US$*								*Monthly usage*	*Usage type*	*Transport factor*	*No fault incident factor*	*Maintenance cost per month*
		Country 1	*Country 2*	*Country 3*	*Country 4*	*Country 5*	*Initial average*	*Adjustment*	*Adjusted average*					
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*K*	*L*	*M*	*N*	*O*
Combat vehicles														
Tank, main battle tank — heavy														
Tank, main battle tank — medium														
Tank, recovery — heavy														
Tank, recovery — medium														
Tank, all other types	Special case													
Armoured personnel carriers — tracked														
Infantry carrier — unarmed/dozer	347 498	-	5.84				5.84	100%	5.84	350	km	2%	0.5%	2 157.00
Infantry carrier — armed	-	-								350	km	2%	0.5%	-
Missile equipped	-	-								200	km	2%	0.5%	-
Mortar	-	-								200	km	2%	0.5%	-
Recovery	-	15.04								250	km	2%	0.5%	-
Air-defence	Special case													
Command post	600 156	-	10.09				10.09	100%	10.09	100	km	2%	0.3%	1 104.00

Columns:

C-G National cost of spares per km (or hr) [from troop contributor worksheets].
H Initial average = sums all countries and divides by number of countries with value greater than zero.
I Adjustment factor to ensure against excessive price increases.
J Adjusted average = initial average * adjustment = (H * I).
K Monthly usage information.
L Usage type (km. or hrs.).
M Transportation factor.
N No fault incident factor.
O Average maintenance cost per km. x monthly usage x (1 + transportation factor) + (GFMV/12 * no fault incident factor/2) = {J*K*(1+M)+[B/12*N/2]} {values carry forward to summary page}.

For column O, the no fault incident factor assumes that the troop-contributing nations will lose at least one vehicle per year, hence it multiplies the no fault incident factor against the entire value of the equipment divided by 12 months rather than dividing by the useful life first.

D. Petroleum, oil and lubricants cost format

	Petroleum, oil and lubricants cost format per km (or hour) in US$										*Petroleum, oil and lubricants cost per month*
Contingent-owned equipment category	*Country 1*	*Country 2*	*Country 3*	*Country 4*	*Country 5*	*Initial average*	*Adjust*	*Adjusted average*	*Monthly usage*	*Usage type*	
A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*K*	*L*
Combat vehicles											
Tank, main battle tank — heavy											
Tank, main battle tank — medium											
Tank, recovery — heavy											
Tank, recovery — medium											
Tank, all other types	Special case										
Armoured personnel carriers — tracked											
Infantry carrier — unarmed/dozer	1.5	0.48				0.99	100%	0.99	350	km	347
Infantry carrier — armed	-	-							350	km	-
Missile equipped	-	-							200	km	-
Mortar	-	-							200	km	-
Recovery	-	-							250	km	-
Air-defence	Special case										
Command post	1.5	1.24				1.37	100%	1.37	100	km	137

Columns:
B-F National POL costs from troop contributor worksheets.
G Sums all countries and divides by number of countries with value greater than zero.
H Adjustment to ensure against excessive price increases.
I Adjusted average POL cost = (H * J).
J Monthly usage information.
K Usage type (km or hours).
L Final POL value = (I * J) {values carry forward to summary page}.

E. Summary

Contingent-owned equipment category	*Generic fair market value*	*Maintenance rate*	*Monthly rates*		*Non-United Nations petroleum, oil and lubricants*
			Dry lease	*Wet lease*	
A	*B*	*C*	*D*	*E*	*F*
Combat vehicles					
Tank, main battle tank — heavy	-	-	-	-	-
Tank, main battle tank — medium	-	-	-	-	-
Tank, recovery — heavy	-	-	-	-	-
Tank, recovery — medium	-	-	-	-	-
Tank, all other types	Special case	-	-	-	-
Armoured personnel carriers — tracked					
Infantry carrier — unarmed/dozer	347 498	2 157	1 303	3 460	347
Infantry carrier — armed	-	-	-	-	-
Missile equipped	-	-	-	-	-
Mortar	-	-	-	-	-
Recovery	-	-	-	-	-
Air-defence	Special case	-	-	-	-
Command post	600 156	1 104	2 151	3 255	137
Air liaison office/Forward air control/Artillery	Special case	-	-	-	-
Radar	Special case	-	-	-	-
Ambulance/rescue	-	-	-	-	-
Cargo	-	-	-	-	-
Armoured personnel carriers — wheeled					
Infantry carrier — unarmed	470 000	3 403	1 958	5 361	450
Infantry carrier — armed	575 750	1 244	2 399	3 643	450
Missile equipped	940 000	894	6 006	6 900	225
Mortar	517 000	717	2 154	2 871	225
Recovery	528 750	3 274	2 203	5 477	450
Air-defence	Special case	-	-	-	-
Command post	646 250	590	2 316	2 906	75
Air liaison office/Forward air control/Artillery	Special case	-	-	-	-

Columns:
B From dry lease methodology worksheet.
C From maintenance worksheet.
D From dry lease methodology worksheet.
E Dry lease rate plus maintenance rate = (D + C).
F From POL methodology worksheet.

Annex V

Internal transportation data

TCC Example only

Serial	*Data requested*
	Distance
	What is the maximum total distance any contribution your country would make to a United Nations mission would travel from their point of usual residence to the POE?
1	Road
2	Rail
3	Air
4	Sea
	Road
5	What is the national average commercial cost per kg or cubic metre/km for freight consigned from your country to your usual POE?
6	What is the average military cost per km for a 2,500 kg truck equivalent in your country?
7	What is the average cost per km for a 4,000 kg-10,000 kg and above truck equivalent in your country?
8	What is the average cost per km for a truck above 10,000 kg equivalent in your country?
	Rail
9	What is the cost per cubic metre shipped by rail in your country?
10	What additional costs do you incur by freighting hazardous *matériel* such as explosives, chemicals?
11	Do you have to change rail gauge or pass through a transit station during the deployment to a POE?
12	What does that cost per unit or cubic metre?
	Air
13	What is the cost per cubic metre shipped by air in your country?
14	What additional costs do you incur by freighting hazardous *matériel* such as explosives, chemicals?
15	What handling charges would you expect to pay/kg or cubic metre at the point of outload/transit/POE (total)?
16	What is the average cost per flying hour allocated to a C-130 Hercules Aircraft equivalent flying between the usual residence of a normal contribution to a POE?
	Sea
17	What is the cost per cubic metre shipped by air in your country?
18	What additional costs do you incur by freighting hazardous *matériel* such as explosives, chemicals?
	Borders
19	How many borders would your country's contribution cross during the process of transporting contingent-owned equipment and personnel to a mission?
20	What does each border crossing cost you on average?

Annex VI

Methodology for determining self-sustainment rates

Contingent: Methodology for determining self-sustainment phase 5 Working Group

(United States dollars)

Category	*Subcategory*	*United Nations base rate*	*United Kingdom*	*Burkina Faso*	*Italy*	*New Zealand*	*Netherlands*	*Jordan*	*TCN*	*TCN*	*TCN*	*TCN*	*TCN*	*Overall average*	*S Change from United Nations rate*
Catering		25.25	27.98	30.30	28.10	27.36	16.50	31.70						26.99	1.07
Communications	VHF/UHF-FM	45.50	50.43	54.60	48.00	48.75	48.58							50.07	1.10
	HF	15.25	18.90	18.30	22.00	17.56	16.28							18.61	1.22
	Telephone	13.00	14.41	15.60	15.00	15.50	13.88							14.88	1.14
	ADP														
Office		21.25	23.55	25.50	35.00	19.70	32.50	39.33						29.26	1.38
Electrical		25.00	27.71	30.00	38.00	27.80	36.50							32.00	1.28
Minor engineering		14.00	15.52	16.80	20.00	15.00	3.50							14.16	1.01
Explosive ordnance disposal		6.50	7.20		8.00	5.50	11.25							7.99	1.23
Laundry and cleaning		21.25	23.55		62.00	25.00	8.00							29.64	1.39
Tentage		20.00	22.17	24.00	50.00	23.00	20.00							27.83	1.39
Accommodation		36.00	39.90		190.00	40.00	46.00	177.54						98.69	2.74
Medical	Basic	2.00	2.22	2.40	4.00	2.25								2.72	1.36
	First line	18.25	20.23	21.90	21.00	19.77								20.73	1.14
	Level II	37.50	51.79		75.00	52.00								59.60	1.59
	Dental	10.00	11.08		25.00	12.08								16.05	1.61
	Blood and blood products	13.00	14.41		18.00	34.30								22.24	1.71
Observation	General	1.00		1.20	1.50	1.15	1.00							1.21	1.21
	Night observation	23.25		27.90	25.00	20.12								24.34	1.05
	Positioning	5.00		6.00	10.00	8.22								8.07	1.61
Identification		1.00			1.75	0.97	1.00							1.24	1.24

Category	Subcategory	United Nations base rate	United Kingdom	Burkina Faso	Italy	New Zealand	Netherlands	Jordan	TCN	TCN	TCN	TCN	TCN	Overall average	% Change from United Nations rate
Nuclear, biological and chemical protection		24.25			28.00	25.00	10.50							21.17	0.87
Field defence stores		30.25		36.30	45.00	31.00	42.00							38.58	1.28
Miscellaneous general stores	Bedding	14.00		16.80	18.00	15.82	10.50							15.28	1.09
	Furniture	22.00		26.40	25.00	23.23	10.50							21.28	0.97
	Welfare	5.00		6.00	8.00	8.78	6.00							7.20	1.44
Total		**449.50**	**371.05**	**360.00**	**821.35**	**519.86**	**334.49**	**248.57**						**609.82**	**33.12**

Annex VII

Self-sustainment performance standards

Existing support categories — Discussion paper

1. Background. At present, the "all or nothing" provisions of the COE concept deny a contributing country (which is providing partial support to its contingent) eligibility for any reimbursement in a support category if the United Nations is providing any element of support in that category.

2. Taking office support as an illustration, a country could be providing its contingent with office furniture and office equipment and the United Nations could be providing the contingent with only consumable office supplies. The current provisions deny that country any reimbursement, though national authorities have incurred significant costs in providing the other two areas of office support.

3. This has led to the situation where, in the course of some COE negotiations, national and United Nations COE authorities have mutually agreed to the country receiving some percentage of reimbursement eligibility in recognition of the cost incurred reality, notwithstanding that the United Nations may have been providing some element of the support in that category. This practice is a direct contravention of the COE provisions authorized by the General Assembly. It also promotes a potential inconsistency in the reimbursement which one country might receive, compared with that which another country might receive in exactly the same circumstances. This practice, in addition to violating a provision approved by the General Assembly, violates the principles of equity, auditability and transparency, principles which the General Assembly has endorsed among the defining criteria for the new COE system.

4. Proposal. Canada proposes that the current definition of each support area be modified to provide a more flexible and legitimate approach to resolving the problems associated with the current "all or nothing" approach. The proposed approach is admittedly slightly less simple than the current arrangement, but only in the development of the subcategories and attendant rates. The implementation of the proposed approach is a fairly simple and straightforward one. This slight increase in complexity is more than offset by the additional safeguards which the proposal provides in terms of other, equally valid, principles (i.e. fairness/equitability, provision of high-quality logistics support, comprehensiveness, transparency and financial control/auditability). We would also note that, of the existing 15 categories of self-sustainment, four are already subcategorized (i.e. medical, observation, communications and miscellaneous), while the remaining 11 are not. Essentially, the Canadian proposal would involve developing the following subcategories of existing self-sustainment support areas (i.e. based on the performance standards already presented in the COE Manual), in the stated order of priority:

(a) Catering — establish separate subcategories for kitchen facilities, kitchen equipment, kitchen supplies, cold and dry food storage, safe/hygienic facilities (including hot water dishwashers, sterilizers, etc.);

(b) Office — move automatic data processing to the communications category, separate subcategories for office furniture; office furnishings and office supplies.

Annex VIII

Medical Support Services

Part of Phase IV Working Group report (A/C.5/52/39, annex III)

Secretariat proposal: revised medical support services

I. Comments on the current situation

1. In conducting our reviews the terms and rates of reimbursement for major equipment (wet or dry) as well as those for self-sustainment were verified and calculated according to the actual expenditures of United Nations peacekeeping operations from 1991 to 1997. A database of United Nations performance reports and a database of all letters of assist (contingent-owned equipment, medical supplies, medical dental equipment, maintenance and spare parts) showing all medical expenditures from 1991 to 1997 was established.

2. Based on those facts, we have established new levels of medical services, verified all existing medical-related reimbursement rates and, where necessary, have created new United Nations standards and reimbursement rates which facilitate planning and administration of United Nations peacekeeping missions according to current medical standards, taking into consideration United Nations policies and procedures.

3. With current policies and rates for new Memoranda of Understanding, we believe that the Organization faces four major problems:

(a) Reimbursement to troop contributors under current terms and rates does not reflect the real costs of any of the currently valid medical services. Under actual rates for major medical equipment, we estimate approximately two times higher expenditures and for self-sustainment approximately two to three times higher expenditures than the real (average) costs in United Nations peacekeeping missions;

(b) Consequently, actual terms and rates which will be applied retroactively to United Nations field missions will create a funding problem, since the budget calculations for earlier peacekeeping missions were based upon actual expenditures (performance reports) rather than using the new (excessive) rates of the new system of Memoranda of Understanding;

(c) For budgetary calculations (cost estimates of current and future peacekeeping missions) under the administration of the Field Administration and Logistics Division/Logistics Operation Section, new object codes for all categories of equipment and services with reference to the new procedures (Memoranda of Understanding) have to be established in order to ensure that budget proposals revisions are transparent and implementable;

(d) The term "force-wide service" does not reflect the real situation for contingent-owned equipment on the ground and is consequently not applicable to any equipment. We believe that, for example, a Level 2 facility should receive reimbursement for its major equipment regardless of whether it is deployed at a force-wide or a regional level. At present major equipment is reimbursed for force-wide service only and this makes no sense at all, because the costs for equipment in both cases remain the same. Therefore the term "force-wide service" should be deleted. All medical equipment at all levels should be reimbursed according to the standards set by the United Nations.

II. Review of and corrections to the Contigent-owned Equipment Manual

A. Main issues

Our review and proposed amendments to the COE Manual were based upon an examination of the following main issues in contingent-owned equipment reimbursement:

(a) System of reimbursement and payment rates for **self-sustainment arrangements**, especially:

- Verification of existing reimbursement rates according to performance reports of United Nations peacekeeping missions from 1991 to 1997;
- Verification of existing levels of medical services, taking into consideration planning, budgeting/accounting, management of field missions and reimbursement (claims);
- Establishment of new United Nations standards, new levels of medical services comprising capabilities, capacities, equipment lists, standard costs for medical equipment according to United Nations experience of the last eight years of peacekeeping, including comments/suggestions of several Member States and different medical concepts;

(b) System of reimbursement and payment rates for **major equipment** under **dry lease** arrangement, based on actual expenditures in peacekeeping missions from 1991 to

1997 (in-survey values, letters of assist for depreciation of contingent-owned equipment and transport);

(c) System of reimbursement and payment rates for **major equipment** under **wet lease** arrangement, based on actual expenditures in peacekeeping missions from 1991 to 1997 (letters of assist for maintenance and spare parts);

(d) Review of the term **"force-wide medical service"**;

(e) Review of **"retroactive payments"** through Memoranda of Understanding in claims and its consequences for the Organization.

B. Changes to the Manual

Presented below are draft changes to various parts of the United Nations Manual on Policies and Procedures concerning Reimbursement and Control of Contingent-owned Equipment of Troop-contributing Countries Participating in Peacekeeping Missions (the COE Manual):

1. Chapter 2. Standard elements of the system; 8. Self-sustainment; paragraph 28 (j)

Category	Medical services	Monthly rate per person served
Medical	Basic level	US$ 2.00
	Level 1 (lab included)	13.23
	Level 2 (dental and lab included)	20.63
	Level 3 (dental and lab included)	25.13
	Dental only	2.50
	Laboratory only	4.50
	Blood and blood products	2.20
	High-risk areas (epidemiological)	8.70

Remarks

If a troop contributor provides medical services according to United Nations standards which include services of more than one level, these levels shall be accumulated accordingly. However, dental and lab services will only be reimbursed for one level.

2. Chapter 3, Annex A. paragraph 13

Only medical equipment provided as per United Nations standards (see "United Nations Levels of Medical Support" (appendix I)) and as authorized in the Memorandum of Understanding will be reimbursed as major equipment.

To be eligible for reimbursement for medical services, the contingent must provide "self-sustainment" (including all necessary supplies and consumables) for Basic, Level 1, Level 2, Level 3, Blood and blood products and High-risk areas as stipulated in the United Nations Manual on Policies and Procedures concerning Reimbursement and Control of Contingent-owned Equipment of Troop-contributing Countries Participating in Peacekeeping missions, the "United Nations Levels of Medical Support" and as authorized in the Memorandum of Understanding.

Therefore the equipment stipulated in the Memorandum of Understanding is applicable wherever medical equipment is used for the provision of medical services providing Level 1, 2 and 3 services according to United Nations standards which includes general medicine, internal medicine, surgical, dental, hygiene, dispensary, blood testing and processing, X-ray, laboratory, ward and stabilization/life-saving measures and capabilities and evacuation to the next level.

Reimbursement for medical services, which includes all necessary supplies, will be made according to the number of personnel per month served under a self-sustainment arrangement.

Chapter 3, Annex A, paragraph 14

The contingents must have sufficient medical equipment as stipulated in the United Nations standards for Level 1, 2 and 3 medical services in order to provide the respective outpatient and inpatient care, basic and advanced diagnostic services, basic and advanced lifesaving, basic and advanced surgical capacities and capabilities, sufficient resupply capabilities, as well as casevac/medevac capabilities and capacities in the mission area as authorized in the Memorandum of Understanding. Requested medical equipment must be provided and maintained in a fully operational condition, maintaining an aseptic environment and sterility as per World Health Organization (WHO) requirements in order to ensure uninterrupted medical support and an adequate standard of medical services, including evacuation capabilities. The minimum quality ofall pharmaceuticals, medical consumables and medical equipment provided must meet United Nations standards.

See "United Nations requirements for the provision of medical supplies" (appendix II).

4. Chapter 3, Annex B, paragraph 25

To receive the medical self-sustainment rate the contingent or unit has to provide medical services (medical supplies) for all personnel of the unit, contingent or force, based on the number of personnel served. Should a contingent receive medical services from another contingent, the self-sustainment rates will be paid to the contingent providing the services. The standards for each medical service of self-sustainment rates are as follows:

Basic Level

("Soldier" level or "Buddy-Aid")

Comprises the basic immediate first aid provided to a casualty by the nearest person on site at the point of injury, including personal medical and hygiene supplies (e.g. field dressing, repellent, personal water purification, aspirin, etc.). All United Nations peacekeepers must have basic knowledge and skills in first aid.

See "United Nations levels of medical support" (appendix I) – Basic Level.

Level 1

("Battalion" level)

- Comprises the first level where medical assistance is provided by a doctor and his team. This level of support is usually provided by organic medical teams of the field units who provide resuscitation, stabilization, triage and evacuation of ill or injured personnel;
- Provides casualty collection and evacuation to higher levels of medical care (Level II and/or Level III);
- Handles routine sick calls and the management of minor sick and injured;
- Implements disease, non-battle injury and stress-preventive measures;
- Provides treatment to 20 ambulatory patients per day, holding capacity of 5 patients up to 2 days, medical supplies and consumables for 60 days;
- Provision of medical services based on troop strength of 500 to 700.

See "United Nations levels of medical support" (appendix I) – Level 1.

Level 2

("Brigade" level, surgical facility, basic field hospital)

- Comprises a medical facility (basic field hospital) with limited specialist expertise (doctors) and limited (basic) surgical, intensive care, dental, laboratory, X-ray, ward, sterilization and pharmaceutical capabilities (e.g., life, limb and organ-saving surgery, definitive treatment against a wide variety of common diseases/illnesses);
- Capability of 3 to 4 surgical operations per day, hospitalization of 10 to 20 sick or wounded up to 7 days, up to 40 outpatients per day, 5 to 10 dental consultations per day, medical supplies, fluids and consumables for 60 days;
- Provides advanced specialist medical care to stabilize serious injured personnel for transport in Level 3 medical facility;
- Provision of medical services based on troop strength of 1,000;
- Provides resupply for Level 1 units.

See "United Nations levels of medical support" (appendix I) – Level 2.

Level 3

("Advanced field hospital")

- Comprises a fully equipped and staffed multidisciplinary (advanced) field hospital which provides all major medical and surgical specialities;
- Provides advanced services in surgical, intensive care, dental (emergency dental surgery), laboratory, X-ray, ward and pharmaceutical capabilities;
- Performs up to 10 surgical operations per day, provides hospitalization of 50 patients up to 30 days, up to 60 outpatient consultations per day, up to 10 dental consultations per day, up to 20 X-rays and 40 lab tests per day, medical supplies and consumables for 60 days;
- Provision of medical services based on troop strength of 3,000 to 5,000;
- Provides resupply to Level 2 units.

See "United Nations levels of medical support" (appendix I) – Level 3.

Blood and blood products

- Maintains a sufficient supply of fresh blood and blood products, according to United Nations standards,

including transport, testing, handling and administration;

- Provides climate-controlled storage and transport capability ("cold chain") to prevent the deterioration or contamination of blood and blood products;

- Has the ability to administer blood and blood products according to the compatibility of blood groups and rhesus factors using approved hygiene to prevent contamination;

- Performs blood testing and grouping.

See "United Nations requirements for the provision of medical supplies" (appendix II).

High-risk areas (epidemiological)

Provides medical supplies (drugs, special vaccinations, chemoprophylaxes and special supplies, etc.) for epidemiological critical areas with high risks of infectious and tropical diseases.

5. Chapter 3, Annex B, paragraph 26

The contingent must provide all related minor equipment, tools and supplies to ensure uninterrupted medical services. The minimum quality of all pharmaceuticals, medical consumables and medical equipment must meet United Nations standards.

See "United Nations requirements for the provision of medical supplies" (appendix II).

6. Chapter 3, Annex B, paragraph 27

Vaccinations, as recommended by the United Nations, are a national responsibility. The United Nations will provide necessary information on what kind of vaccination and preventive measures shall be given to all United Nations personnel prior to deployment. If any United Nations personnel are deployed without proper vaccinations and prophylaxes, the United Nations will provide necessary booster shots and prophylaxes. In this case, the United Nations will deduct any expenses for initial vaccinations which could have been initiated prior to deployment from the self-sustainment payment of troop contributors.

7. Chapter 8, part A, Reimbursement rates for major equipment

Category of equipment	Current flat rate per month as of 96	Estimated useful life (years)	Estimated annual attrition rate	Monthly rate		Non-fault incident factor (%)	Note: United Nations policy
				Dry lease	Wet lease		
Level 1	163 600	8				0.1	
Level 2	1 180 430	8				0.1	
Level 3	2 052 500	8				0.1	
Dental	147 600	8				0.1	
Laboratory	22 800	8				0.1	

Remarks

A troop contributor will be reimbursed on a flat-rate basis.

See "United Nations levels of medical support" (appendix I).

8. Chapter 8, part B, Self-sustainment rates

Category	Subcategory	Monthly rate per person served
Medical	Basic level	US$ 2.00
	Level 1 (lab included)	13.23
	Level 2 (dental and lab included)	20.63
	Dental only	2.50
	Laboratory only	4.50
	Blood and blood products	2.20
	High-risk areas (epidemiological)	8.70

Remarks

If a troop contributor provides medical services which include more than one level, those levels shall be accumulated accordingly. However dental and lab services will only be reimbursed for one level.

9. Chapter 9, Annex C, Self-sustainment, 1 – Requirements

Category	Subcategory	Monthly rate per person served
Medical	Basic level	US$ 2.00
	Level 1 (lab included)	13.23
	Level 2 (dental and lab included)	20.63
	Level 3 (dental and lab included)	25.13
	Dental only	2.50
	Laboratory only	4.50
	Blood and blood products	2.20
	High-risk areas (epidemiological)	8.70

Remarks

If a troop contributor provides medical services which include more than one level, those levels shall be accumulated accordingly. However dental and lab services will only be reimbursed for one level.

10. Chapter 9, Annex D, Memorandum of Understanding, medical, paragraph 11

Only medical equipment provided as per United Nations standards (see "United Nations levels of medical support" – appendix I) and as authorized in the Memorandum of Understanding will be reimbursed as "major equipment".

To be eligible for reimbursement for medical services, the contingent must provide "self-sustainment" (including all necessary supplies and consumables) for Basic, Level 1, Level 2, Level 3, Blood and blood products and High-risk areas as stipulated in the United Nations Manual on Policies and Procedures concerning Reimbursement and Control of Contingent-owned Equipment of Troop-contributing Countries Participating in Peacekeeping Missions, the "United Nations Levels of Medical Support" and as authorized in the Memorandum of Understanding.

Therefore the equipment stipulated in the Memorandum of Understanding is applicable wherever medical equipment is used for the provision of medical services provided Level 1, 2 and 3 services according to United Nations standards which include general medicine, internal medicine, surgical, dental, hygiene, dispensary, blood testing and processing, X-ray, laboratory, ward and stabilization/life-saving measures and capabilities and evacuation to the next level.

Reimbursement for medical services, which includes all necessary supplies, will be made according to the number of personnel per month served under a self-sustainment arrangement.

11. Chapter 9, Annex D, Memorandum of Understanding, medical, paragraph 12

The continents must have sufficient medical equipment as stipulated in the United Nations standards for Level 1, 2 and 3 medical services in order to provide the respective outpatient and inpatient care, basic and advanced diagnostic services, basic and advanced lifesaving, basic and advanced surgical capacities and capabilities, sufficient resupply capabilities, as well as casevac/medevac capabilities and capacities in the mission area as authorized in the Memorandum of Understanding. Requested medical equipment must be provided and maintained in a fully operational condition, maintaining an aseptic environment and sterility as per WHO requirements in order to ensure uninterrupted medical support and an adequate standard of medical services, including evacuation capabilities. The minimum quality of all pharmaceuticals, medical consumables and medical equipment provided must meet United Nations standards.

See "United Nations requirements for the provision of medical supplies" (appendix II).

12. Chapter 9, Annex E, Memorandum of Understanding, medical, paragraph 22

To receive the medical self-sustainment rate the contingent or unit has to provide medical services (medical supplies) for all personnel of the unit, contingent or force, based on the number of personnel served. Should a contingent receive medical services from another contingent, the self-sustainment rates will be paid to the contingent providing the services. The standards for each medical service of self-sustainment rates are as follows:

Basic Level

("Soldier" level or "Buddy-Aid")

- Comprises the basic immediate first aid provided to a casualty by the nearest person on site at the point of injury, including personal medical and hygiene supplies (e.g., field dressing, repellent, personal water purification, aspirin, etc.). All United Nations peacekeepers must have basic knowledge and skills in first aid.

See "United Nations levels of medical support" (appendix I) – Basic Level.

Level 1

("Battalion" level)

- Comprises the first level where medical assistance is provided by a doctor and his team. This level of support is usually provided by organic medical teams of the field units who provide resuscitation, stabilization, triage and evacuation of ill or injured personnel;
- Provides casualty collection and evacuation to higher levels of medical care (Level II and/or Level III);
- Handles routine sick calls and the management of minor sick and injured;
- Implement disease, non-battle injury and stress-preventive measures;
- Provides treatment to 20 ambulatory patients/day, holding capacity of 5 patients up to 2 days, medical supplies and consumables for 60 days;
- Provision of medical services based on troop strength of 500 to 700.

See "United Nations levels of medical support" (appendix I) – Level 1.

Level 2

("Brigade" level, surgical facility, basic field hospital)

- Comprises a medical facility (basic field hospital) with limited specialist expertise (doctors) and limited (basic) surgical, intensive care, dental, laboratory, X-ray, ward, sterilization and pharmaceutical capabilities (e.g., life, limb and organ saving surgery, definitive treatment against a wide variety of common diseases/illnesses);
- Capability of 3-4 surgical operations/day, hospitalization of 10-20 sick or wounded up to 7 days, up to 40 outpatients/day, 5-10 dental consultations/day, medical supplies, fluids and consumables for 60 days;
- Provides advanced specialist medical care to stabilize serious injured personnel for transport in Level 3 medical facility;
- Provision of medical services based on troop strength of 1,000;
- Provides resupply for Level 1 units.

See "United Nations levels of medical support" (appendix I) – Level 2.

Level 3

("Advanced field hospital")

- Comprises a fully equipped and staff multidisciplinary (advanced) field hospital which provides all major medical and surgical specialities;
- Provides advanced services in surgical, intensive care, dental (emergency dental surgery), laboratory, X-ray, ward and pharmaceutical capabilities;
- Performs up to 10 surgical operations/day, provides hospitalization of 50 patients up to 30 days, up to 60 outpatient consultations/day, up to 10 dental consultations/day, up to 20 X-rays and 40 lab tests/day, medical supplies and consumables for 60 days;
- Provision of medical services based on troop strength of 3,000 to 5,000;
- Provides resupply to Level 2 units.

See "United Nations levels of medical support" (appendix I) – Level 3.

Blood and blood products

- Maintains a sufficient supply of fresh blood and blood products according to United Nations standards including transport, testing, handling and administration
- Provides climate-controlled storage and transport capability ("cold chain") to prevent the deterioration or contanimation of blood and blood products;
- Has the ability to administer blood and blood products according to the compatibility of blood groups and rhesus factors using approved hygiene to prevent contamination;
- Performs blood testing and grouping.

See "United Nations requirements for the provision of medical supplies" (appendix II).

High-risk areas (epidemiological)

- Provides medical supplies (drugs, special vaccinations, chemoprophylaxes and special supplies, etc.) for epidemiological critical areas which have high risks of infectious and tropical diseases.

13. Chapter 9, Annex E, Memorandum of Understanding and clearance sheet, medical, paragraph 23

The contingent must provide all related minor equipment, tools and supplies to ensure uninterrupted medical services. The minimum quality of all pharmaceuticals, medical consumables and medical equipment must meet United Nations standards.

See "United Nations requirements for the provision of medical supplies" (appendix II).

14. Chapter 9, Annex E, Memorandum of Understanding, medical, paragraph 24

Vaccinations, as recommended by the United Nations, are a national responsibility. The United Nations will provide necessary information on what kind of vaccination and preventive measures shall be given to all United Nations personnel prior to deployment. If any United Nations personnel deploy without proper vaccinations and prophylaxes, the United Nations will provide necessary booster shots and prophylaxes. In this case, the United Nations will deduct any expenses for initial vaccinations which could have been initiated prior to deployment from the self-sustainment payment of troop contributors.

Recommendations

1. Based on actual expenditures (statistics of performance reports, letters of assist, requisitions) of United Nations peacekeeping missions, we recommend the establishment and approval of reimbursement rates for medical services (self-sustainment) and wet and dry lease arrangements (major equipment) according to United Nations standards for medical equipment and medical services, as per our proposal:

Self-sustainment

- For self-sustainment, which covers all required medical services, including all necessary supplies, we recommend that the following existing and/or new standard rates be established:

Category	Subcategory	Monthly rate per person served
Medical	Basic level	US$ 2.00
	Level 1 (lab included)	13.23
	Level 2 (dental and lab included)	20.63
	Level 3 (dental and lab included)	25.13
	Dental only	2.50
	Laboratory only	4.50
	Blood and blood products	2.20
	High-risk areas (epidemiological)	8.70

Remarks

If a troop contributor provides medical services according to our standards which include services of more than one level, those levels shall be accumulated accordingly. However dental and lab services will only be reimbursed for one level.

Major equipment

- For major equipment, which includes all related minor and medical equipment, we recommend that:

  (a) The factors "general and fair market value" and "useful life (dry lease)" for any medical equipment be pre-defined according to United Nations standards;

  (b) The factor for "maintenance costs (wet lease)" be reviewed;

  (c) The factor for "no-fault incidents" be reviewed.

We therefore recommend that a troop contributor be reimbursed on a flat-rate basis for the provision of its medical equipment:

Category of equipment	*Generic fair-market value (US$)*	*Estimated useful life (years)*	*Estimated maintenance rate*	*Monthly rate*		*No-fault incident factor (%)*	*Non-United Nations policy*
				Dry lease	*Wet lease*		
Level 1	163 600	8				0.1	
Level 2	1 180 430	8				0.1	
Level 3	2 052 500	8				0.1	
Dental	147 600	8				0.1	
Laboratory	22 800	8				0.1	

See "United Nations levels of medical support" (appendix I) – Levels 1, 2 and 3.

2. If the current procedures remain as they are, we do not recommend the establishment of retroactive payments and/or Memoranda of Understanding.

3. For all budget proposals (cost estimates), we recommend that new object codes be established for all

categories of expenditures of Memoranda of Understanding in order to maintain transparency and accountability.

4. The term "force-wide service" should not be used at all.

5. We recommend that troop contributors be reimbursed on a flat-rate basis for their medical equipment and medical services provided according to United Nations standards as outlined in the Memoranda of Understanding.

Appendix I

United Nations levels of medical support

Introduction: Description of levels

1. There are essentially four levels of medical support in the United Nations medical support system for peacekeeping operations. They are:

(a) Basic level ("soldier" level or "buddy-aid"). This comprises the basic immediate first aid provided to a casualty by the nearest person on site;

(b) Level 1 ("battalion" level). This is the first level where trained medical personnel (including a doctor) are present. This level of support is usually provided by organic medical teams of the field units;

(c) Level 2 ("brigade" level surgical facility). This is a medical facility with limited specialist expertise and limited surgical capabilities. Life, limb and organ saving surgery can be performed here;

(d) Level 3 ("field hospital"). This is a fully equipped and staff multidisciplinary field hospital. All major medical and surgical specialties are provided for;

(e) Level 4 (static hospital). This usually refers to a full-fledged hospital either in the host country or in the troop-contributing country.

Importance of "buddy" aid (Basic level)

2. The initial treatment provided on site at the point of injury is a critical step in saving a life, organ or limb. Often is as basic as maintaining the airway to allow the casualty to breathe or a simple dressing to stop bleeding. A person trained in the very basics of essential first aid can do a significant amount to save a life and also to reduce the suffering of the ill or wounded. It is hence essential for all United Nations peacekeepers to have basic knowledge and skills in first aid.

3. The responsibility of training peacekeepers in first aid lies with the troop commanders and medical officers. The troops should be trained in their home countries prior to deployment in the mission area. They should also be equipped with personal field dressings and pocket masks. The essential components of "buddy" aid which the troops are expected to be trained in are described in the following paragraphs.

Components of buddy aid

4. The following are the essential elements of buddy aid for all peacekeepers:

(a) Cardiopulmonary resuscitation (CPR):

- Performing mouth-to-mouth resuscitation and using a pocket mask;
- Performing cardiac or chest compression;

(b) Control of haemorrhage (or bleeding):

- Applying pressure dressings and bandages to stop bleeding;
- Preventing further bleeding;

(c) Fracture immobilization:

- Immobilizing fractures in order to prevent further injury and to reduce pain;

(d) Wound dressing and bandaging:

- Dressing various types of common wounds;
- Dressing wounds in various parts of the body;

(e) Casualty transport and evacuation:

- Preparing a casualty for transportation;
- Transporting a casualty by stretcher;
- Improvising transportation in the absence of a stretcher;

(f) Communications and reporting:

- Procedures for reporting accidents and injuries in the mission area;
- Procedures for activating medical personnel and ambulances;
- Procedures for activating air-evacuation (if applicable).

Conduct of training

5. Buddy aid training for peacekeepers should focus on practical aspects, covering only the bare essentials of theory. The trainees should have adequate practice to ensure skills proficiency. Training should be conducted by trained medical personnel with experience in such training. All personnel must be familiar with the use of all items found in standard first-aid kits. Periodical continuation training must be conducted to ensure skills maintenance.

Equipping of peacekeeping troops

6. All troops must be equipped with one-time-use personal field dressing. It is recommended that all troops be issued one-time-use personal pocket masks (for mouth-to-mouth resuscitation) but this is optional. They should be proficient in the use of these items and must be aware of how to obtain resupply should the items be used or damaged.

United Nations levels of medical support

Basic level@

MEDICAL LEVELS	TREATMENT CAPABILITY	TREATMENT CAPACITY	STAFFING REQUIREMENT	EQUIPMENT REQUIREMENT	INFRASTRUCTURE REQUIREMENT	REIMBURSEMENT RATE (per capita per month)	REMARKS
BASIC level	-'Buddy-Aid' by non-medical personnel - Skills: 1. Cardio Pulmonary Resuscitation 2. Haemorrhage Control 3. Fracture Immobilisation 4. Wound dressing and Bandaging (including burns) 5. Casualty Transport And Evacuation 6. Communications and Reporting.	2 Casualties	Nil	- First Aid Kit* - Personal field Dressing - Personal Pocket Mask ** *See appendix 1-A for detailed list of items in the First aid Kit. ** Optional	Nil	US $ 2.00	-Host Nation will prepare the servicemen with the required medical skills. - The servicemen will be trained to a sufficient level of proficiency as stipulated in the guidelines disseminated by the MSU.* *See Appendix 1-B for guidelines.

@ -- "Soldier" Level or "Buddy" Aid.
-- Basic First Aid Skills which every Peacekeeper should have.

United Nations levels of medical support

Level 1[@]

MEDICAL LEVELS	TREATMENT CAPABILITY	TREATMENT CAPACITY	STAFFING REQUIREMENT	EQUIPMENT REQUIREMENT	INFRASTRUCTURE REQUIREMENT	REIMBURSEMENT RATE (per capita per month)	REMARKS
LEVEL 1	Scope: 1.-Maintenance of airway 2. Ventilation 3. Haemorrhage Control 4. Advanced Life Support 5. Treatment of shock 6. Correction of Dehydration 7. Fracture immobilisation 8. Wound management 9. Burns management 10. Infection control 11. Pain control 12. Minor surgery e.g. - Toilet & Suture - Nail Avulsion - Removal of corns 13. Treatment of common / minor illnesses 14. Stabilisation for evacuation 15. Evacuation	- treatment of 20 ambulatory patients per day - Holding capacity of 5 patients for up to 2 days. - Medical supplies and consumables for 60 days.	2 x medical officers 6 x medics / nurses **(able to split into 2 x forward medical teams, each with 1 x medical officer and 3 x medics / nurses)** **(See Appendix 2-A for Structure and Organization Chart)**	- Emergency resuscitation equipment and drugs - Fluids - Splints and bandages - surgical sets for minor surgical procedures - Field dispensary - Stretchers **(see Appendix 2-B for detailed equipment list)**	- Tentage - Containers - Buildings (if available) - Deployment will be sub-divided into 3 main areas: - Resuscitation and Stabilisation - Treatment and minor Surgery - Holding/Observation	US $ 13.23	- The level 1 unit must be able to split into 2 x forward medical teams - All equipment must be packed in modules to allow this split - All equipment must be portable - the weight, size and shape of packs should enable one person to carry them - All equipment must be transportable by helicopter.

[@] -- Battalion or Regimental Aid Station Equivalent.
-- Based on a Troop Strength of 500 to 700.

United Nations levels of medical support

Level 2@

MEDICAL LEVELS	TREATMENT CAPABILITY	TREATMENT CAPACITY	STAFFING REQUIREMENT	EQUIPMENT REQUIREMENT	INFRASTRUCTURE REQUIREMENT	REIMBURSEMENT RATE (per capita per month)	REMARKS
LEVEL 2	1. Triage, Resuscitation and Stabilisation. 2. Life and limb saving surgical interventions e.g.: - Laparotomy - Thoracocentesis - Appendicectomy - wound exploration - Fracture debridement 3. Anaesthesia (General & Regional) 4. Advanced Life Support and Intensive Care 5. Treatment and observation of common medical conditions and infectious diseases 6. Essential pharmaceutical support 7. Basic dental service - Pain relief - Simple extractions - Simple fillings - Infection control **(Continued Overleaf)**	- 3 to 4 surgical operations per day - Hospitalisation of 10 to 20 sick or wounded at any one time. - Up to 7 days of hospitalisation for each patient. - Up to 40 outpatient consultations per day - 5 to 10 dental consultations per day - 10 x-rays and 20 laboratory tests per day - Medical supplies and consumables for 60 days.	2 x General Surgeons 1 x Anaesthetist 1 x Internist 1 x General Physician 1 x Dentist 1 x Hygiene Officer 1 x Pharmacist 1 x Head Nurse 2 x Intensive care nurses 1 x OT Nurses 10 x nurses/medics 1 x Radiographer 1 x laboratory technician 1 x Dental assistant 2 x Ambulance drivers 1 x Electrician 1 x general mechanic 4 x others (support services) **Total : 33 staff (max 35 staff)** **(See Appendix 3-A for Structure and Organization Chart)**	- Standard OT fixtures and equipment - Standard ICU equipment - Essential laboratory and radiography equipment - dental chair and equipment **(See Appendix 3-B for detailed equipment list)**	1. Hospital a. Reception / Admin b. 2 x Outpatient Consultation Rooms c. 1 x pharmacy d. 1 x radiography room e. 1 x laboratory f. 1 x dental treatment room g. Dental x-ray room h. 1 x Emergency / Resuscitation / Anaesthesia / Recovery Room i. 1 x Operating theatre j. 1 x Sterilization Room k. 1 or 2 x 10 bed wards l. 1 to 2 bed Intensive Care Unit **(Continued Overleaf)**	1. Epidemiological low - risk areas : US $ 20.63 2. Epidemiological high- risk areas (requiring malaria prophylaxis, Vaccinations etc) US $ 29.33	- The level 2 facility must be able to configure at least 2 forward medical teams capable of resuscitating and treating casualties on-site. - Each of these teams comprises 1 x doctor and 2 x nurses/medics. - There must be provision made for sufficient and suitable portable equipment and packs in order to perform this role.

@ – Regional Medical support in a Mission Area with Emergency Surgical Capabilities.
– Based on a Troop Strength of 1000.

United Nations levels of medical support

Level 2@

MEDICAL LEVELS	TREATMENT CAPABILITY	TREATMENT CAPACITY	STAFFING REQUIREMENT	EQUIPMENT REQUIREMENT	INFRASTRUCTURE REQUIREMENT	REIMBURSEMENT RATE (per capita per month)	REMARKS
LEVEL 2 (Cont'd)	8.Basic laboratory facility - Blood group & cross matching - Hb - Leucocyte count - ESR - Gram staining - Blood film - Urine analysis 9. Basic diagnostic Radiography 10. Hygiene control and Prevention of disease 11. Evacuation of casualties to Level 3 And level 4 facilities. 12. Capability to resupply Level 1 facilities.				2. **Support Services** a. Kitchen b. Laundry c. Supply storage facility d. Maintenance room e. Communications f. Transportation (Ambulance/ Air evacuation) g. Generator room h. Fuel storage i. Staff room j. Water / Sanitation/ Waste Disposal 3. **Accommodation** a. Tentage b. Containers c. Fixed Shelters		

@ – **Regional Medical Support in a Mission Area with Emergency Surgical Capabilities.**
– **Based on a Troop Strength of 1000.**

United Nations levels of medical support

Level 3@

MEDICAL LEVELS	TREATMENT CAPABILITY	TREATMENT CAPACITY	STAFFING REQUIREMENT #	EQUIPMENT REQUIREMENT	INFRASTRUCTURE REQUIREMENT	REIMBURSEMENT RATE (per capita per month)	REMARKS
LEVEL 3	- As per Level 2 In Addition: 1. Full multi-discipline surgical facilities with post-operative care. 2. Full laboratory services 3. Extended investigative radiological capabilities, including Ultrasound 4. Full pharmaceutical services including the capability to resupply Level 1 and level 2 units. 5. Extended Dental treatment to include emergency dental surgery.	- Up to 10 surgical operations per day - Hospitalisation of 50 patients at any one time. - Up to 30 days of hospitalisation for each patient - 50 to 60 outpatient consultations per day - 10 dental consultations per day - 20 x-rays and 40 laboratory tests per day - Medical supplies and consumables for 60 days.	4 x General Surgeons 1 x Orthopaedic Surgeon 1 x Obs. & Gynae. 1 x Dermatologist 2 x Anaesthetist 2 x Internist 4 x General Physicians 1 x Dental Surgeon 1 x Dentist 1 x Psychiatrist/ Psychologist 1 x Hygiene Officer 1 x Pharmacist 1 x Head Nurse 4 x Intensive care nurses 4 x OT Nurses 40 x nurses/medics 1 x Pharmacist Asst. 2 x Radiographer 2 x laboratory technician 2 x Dental assistant (Continued Overleaf)	- Standard OT fixtures and equipment - Standard ICU equipment - Essential laboratory and radiography equipment - 2 x dental chairs and equipment (See Appendix 4-B for detailed equipment list)	1. Hospital a. Reception / Admin b. 3 to 4 x Outpatient Consultation Rooms c. 1 x pharmacy d. 1 x radiography room e. 1 x laboratory f. 1 x dental treatment room (2 chairs) g. Dental x-ray room h. 1 x Emergency / Resuscitation / Anaesthesia / Recovery Room i. 2 x Operating theatres j. 1 x Sterilization Room k. 2 x 25 bed wards (or any configuration For 50 beds) l. 1 to 4 bed Intensive Care Unit (Continued Overleaf)	1. Epidemiological low - risk areas : US $ 25.13 2. Epidemiological high- risk areas (requiring malaria prophylaxis, Vaccinations etc) US $ 33.83	The level 3 facility must have the capability of forming small forward medical teams (1 x doctor and 2 x nurses/medics) with portable resuscitation equipment and portable supplies and consumables.

@ -- Fully Deployed Field Hospital.
-- Based on a Troop Strength of 3000 to 5000.
-- Of the 4 General Surgeons, there should preferably be at least one with experience/training in performing Craniotomies and one with experience/ training in Urology. The Internists should preferably have specialised knowledge in Cardiology and Tropical Medicine.

United Nations levels of medical support

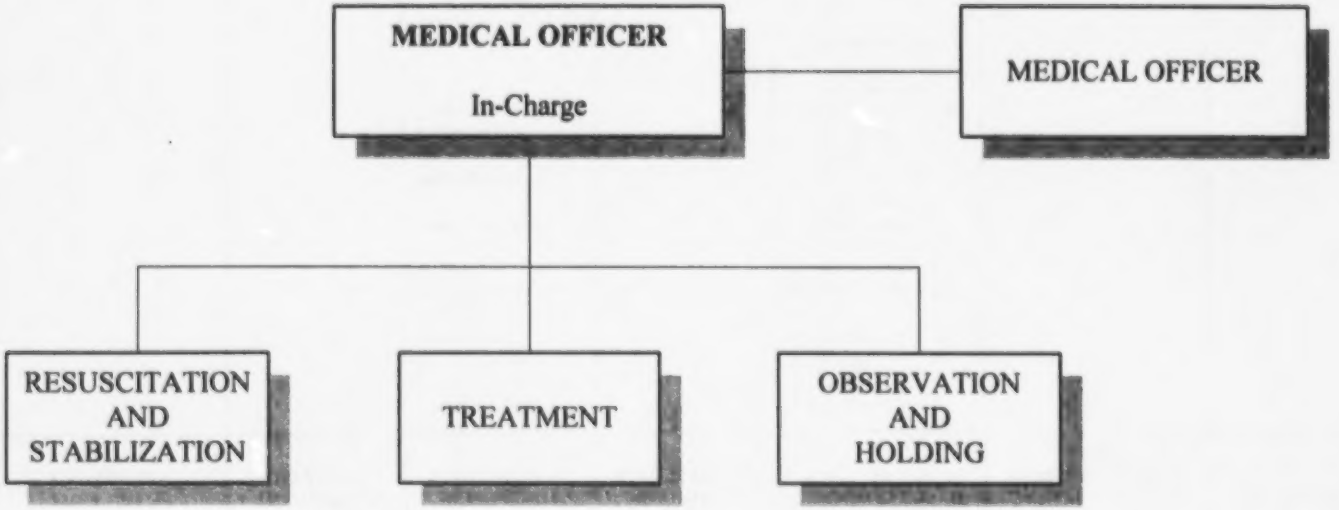
Level 3@

MEDICAL LEVELS	TREATMENT CAPABILITY	TREATMENT CAPACITY	STAFFING REQUIREMENT	EQUIPMENT REQUIREMENT	INFRASTRUCTURE REQUIREMENT	REIMBURSEMENT RATE (per capita per month)	REMARKS
LEVEL 3 (Cont'd)			4 x Ambulance drivers 1 x Electrician 1 x general mechanic 8 x others (support services) **Total : 90 staff** **(See Appendix 4-A for Structure and Organization Chart)**		2. Support Services a. Kitchen b. Laundry c. Supply storage facility d. Maintenance room e. Communications f. Transportation (Ambulance/ Air evacuation) g. Generator room h. Fuel storage i. Staff room j. Water / Sanitation / Waste Disposal 3. Accommodation a. Tentage b. Containers c. Fixed Shelters		

@ -- Fully Deployed Field Hospital.
-- Based on a Troop Strength of 3000 to 5000.

UNITED NATIONS MEDICAL SUPPORT
LEVEL 1 MEDICAL UNIT

STRUCTURE AND ORGANIZATION



APPENDIX 1-A

UNITED NATIONS MEDICAL SUPPORT

STANDARD FIRST AID KIT
CONTENTS

S/No.	ITEM	QTY	REMARKS
01.	Pouch or Box	01	1. A box is suitable in facilities where the kit is expected to remain static. Where there is a requirement for the Kit to be portable, a pouch with sling is to be used. 2. The following facilities must have at least one First Aid Kit : A. All Vehicles B. All workshops and maintenance facilities. C. All Kitchens and cooking facilities. D. Any other area where a Force Commander or Force Medical Officer deem it necessary to have a First Aid Kit. 3. The FMO and staff appointed by him are responsible for the training of the relevant personnel and the maintenance of the First Aid Kits.
02.	Field Dressing (small)	05	
03.	Field Dressing (large)	01	
04.	Burns Dressing	01	
05.	Triangular Bandages	05	
06.	Sterile Gauze Pads	10	
07.	Roller bandages/Gauze rolls	05	
08.	Sterile Cotton Wool	100g	
09.	Wound Cleansing Solution (e.g. Cetrimide, Alcohol)	01 bottle	
10.	Adhesive Tape	02 rolls	
11.	Safety Scissors (Super Shear)	01	
12.	Pocket Mask	01	
13.	Gloves (size 71/2)	02 pairs	
14.	Arterial Tourniquet	01	

UNITED NATIONS MEDICAL SUPPORT
LEVEL 1 MEDICAL FACILITY
(EQUIPMENT REQUIREMENT)

@ - Self Sustainment Reimbursement Rate
# - Major Equipment Reimbursement Rate

FUNCTION	ITEM	QUANTITY	COST (US $)
A. Administration Logistics and Communications	I. Furniture @	Adequate	4 000
	ii. Stationery/Documentation @	Adequate	1 000
	iii. Computer/Printer* @	1 Set	3 000
	iv. Telephone* @	1 line	1 000
	v. Facsimile* @	1 line/set	1 000
	vi. VHF/UHF Communications @	Suitable to Mission	5 000
	vii. Storage (Boxes, Cupboards etc.) @	Adequate	2 000
	viii. Standby Generator (Portable) @	1	5 000
	* Optional. Where possible or feasible.		

FUNCTION	ITEM	QUANTITY	COST (US $)
B. Emergency Treatment / Consultation	I. Desk and Chairs @	1 set	2 000
	ii. Examination Couch #	1 set	2 000
	iii. Essential Diagnostic Equipment #	1 or 2 sets	
	- Stethoscope #		100
	- Ophthalmoscope #		500
	- Otoscope #		500
	- ECG machine #		5 000
	- Reflex mallet #		100
	- Thermometers #		50
	- Sphygmomanometer #		100
	- Gynecological speculum #		300
	- Proctoscope #		300
	- Measuring Tape #		10
	- Torch #		20
	- Examination lamp #		2 000
	- Miscellaneous #		1 000
	iv. X-ray View Box #	1	1 000
	v. Minor treatment /dressing sets. @	Adequate quantity -Consumables	
	vi. Resuscitaion trolley (fully equipped) #	1 set	2 000
	vii. Intubation set #	1 set	1 500
	viii. Coniotomy set #	1 set	500
	ix. ECG Machine #	1	5 000
	x. Defibrillator #	1	8 000
	xi. Oxygen cylinder #	2 cylinders	400
	xiii. Nebuliser #	1	200
	xiv. Suction Unit #	1	1 000
	xv. Perfusion stands #	2	400
	xvi. General purpose sets #	3	600

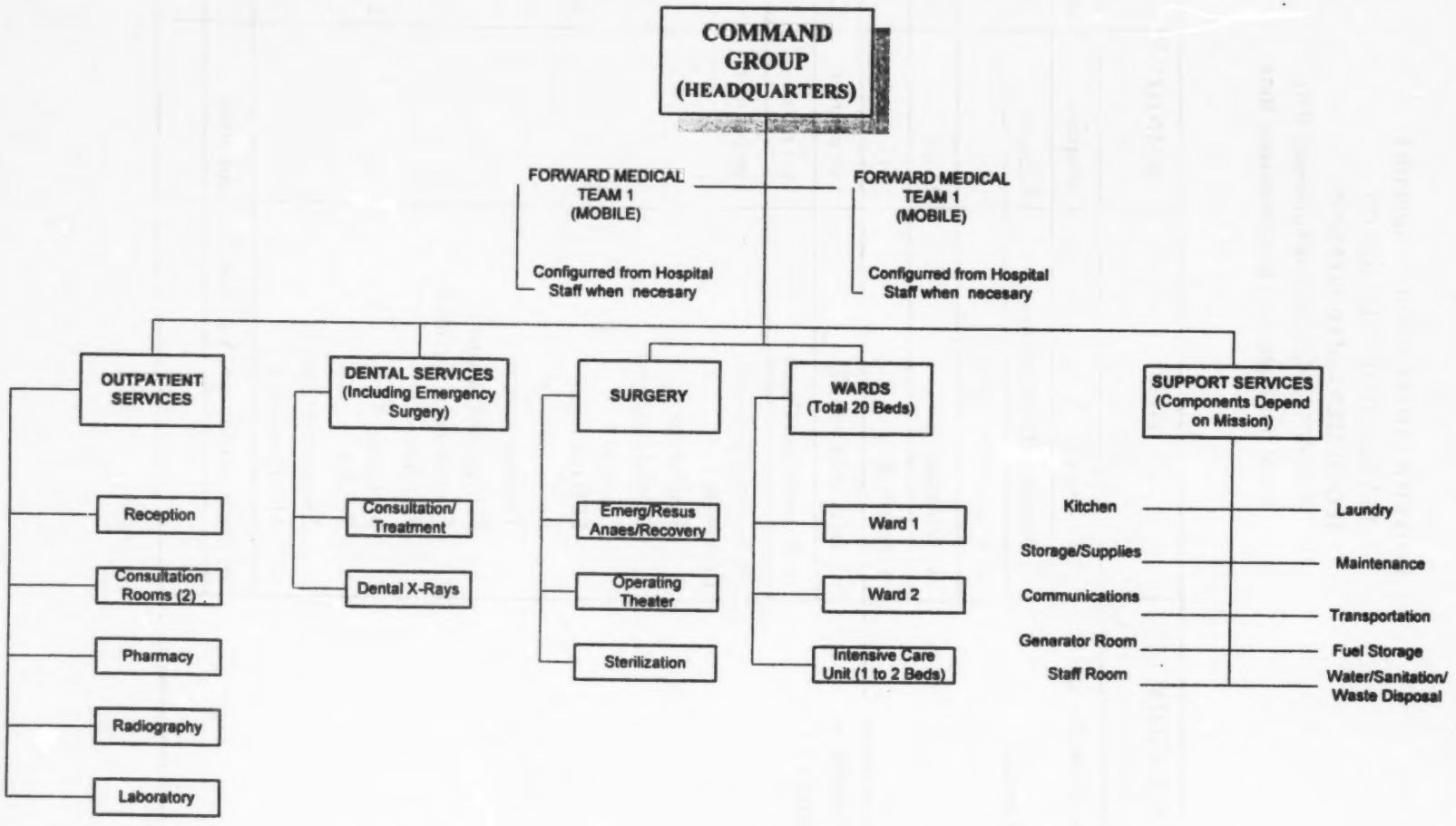
FUNCTION	ITEM	QUANTITY	COST (US $)
	xvii. Sets for chest -tube insertion, catheterization and venous 'cut-downs'. #	1 Set each	600
	xviii. Infusion Pump #	1 Set	3 000
	xviv. Pulse Oximeter #	1 Set	3 000
C. Pharmaceuticals CONSUMABLES	I. Analgesics @	Adequate quantity and essential variety to support up to 500 troops for a period of 3 months.	
	ii. Antipyretics @		
	iii. Antibiotics @		
	iv. Drugs for common respiratory conditions @		
	v. Drugs for common gastro-intestinal conditions @		
	vi. Drugs for common musculo-skeletal conditions @		
	vii. Drugs for common cardiovascular conditions @		
	vii. Drugs for other common illnesses @		
	viii. Resuscitation drugs (including Narcotics) @		

FUNCTION	ITEM	QUANTITY	COST (US $)
D. Laboratory	i. Microscope (binocular) #	1 set	3 000
	ii. Centrifuge #	1 set	3 000
	iii. Urinalysis Kits @		
	iv. Supplies(tubes, slides reagents etc.) @	Adequate quantity -Consumables	
	v. Glucometer #	1 set	1 000
	vi. Refigerator #	1	800
	vii. Analyser (Reflotron Type) #	1	15 000
E. Sterilization	i. Field Autoclave Sterilizer #	1 set	5 000
F. Inpatient care	i. Collapsible Beds #	5	1 500
	ii. Crutches #	2 pairs	120
	iii. Trolley for drugs #	1	2 000
	iv. Untensils for feeding patients #	10 sets	2 000

FUNCTION	ITEM	QUANTITY	COST (US $)
G. Transportation	I. Fully equipped Ambulances #	1	80 000
	ii. Vehicle maintenance equipment #	1 set	5 000
	iii. First Aid Kit @	1 set	
	iv. Furniture and stationery @	Adequate quantity	1 600
H. Miscellaneous (Additional to Level 1 Equipment)	i. Doctor's Bags #	2 sets	3 000
	ii. Paramedic / Nurse Bags #	3 sets	3 000
Medical equipment #		163 600	
Non-medical eqipment @		25 600	

UNITED NATIONS MEDICAL SUPPORT
LEVEL II MEDICAL UNIT

STRUCTURE AND ORGANIZATION



UNITED NATIONS MEDICAL SUPPORT
LEVEL 2 MEDICAL FACILITY
(EQUIPMENT REQUIREMENT)
@ - Self Sustainment Reimbursement Rate
 # - Major Equipment Reimbursement Rate

FACILITY	ITEM	QUANTITY	COST
I. Outpatient Services A. Reception	I. Furniture @	Adequate	16 000
	ii. Stationery/Documentation @	Adequate	4 000
	iii. Computer/Printer @	1 Set	3 000
	iv. Telephone @	2 lines	4 000
	v. Facsimile @	1 to 2 lines/sets	1 000
B. Consultation Rooms (x 2)	I. Desk and Chairs @	1 set per room	2 000
	ii. Examination Couch #	1 per room	2 400
	iii. Essential Diagnostic Equipment #	1 set per room	
	- Stethoscope #		200
	- Ophthalmoscope #		1 000
	- Otoscope #		1 000
	- ECG machine #		10 000
	- Reflex mallet #		200
	- Thermometers #		100
	- Sphygmomanometer #		200
	- Gynecological speculum #		600
	- Proctoscope #		600
	- Measuring Tape #		20
	- Torch #		40
	- Examination lamp#		4 000
	- Miscellaneous #		2 000
	iv. Documentation and Stationery #	Adequate	4 000

FUNCTION	ITEM	QUANTITY	COST (US $)
C. Pharmacy	I. Analgesics @	Adequate quantity and essential variety to support 40 outpatients per day for a period of 60 days. The list of drugs are detailed in the United Nations Medical Support Manual.	
	ii. Antipyretics @		
	iii. Antibiotics @		
	iv. Drugs for common respiratory @ conditions		
	v. Drugs for common gastro-intestinal conditions @		
	vi. Drugs for common musculo-skeletal conditions @		
	vii. Drugs for common cardiovascular conditions @		
	vii. Drugs for other common illnesses @		
	viii. Resuscitation drugs and equipment (Including Narcotics) @		
	ix. Refrigerator for drugs #	1	800
	x.Refrigerator for Blood/Blood products #	1	3000

FUNCTION	ITEM	QUANTITY	COST (US $)
D. Radiography Room	I. X-ray machine #	1 set	65000
	ii. Automatic Film Processor (or dark room) #	1 set	20000
	iii. X-ray table #	1 table	4000
	iv. X-ray View Box #	1	1000
	v. Protective Equipment for staff and patients #	2 sets	4600
	vi. Other films, cassettes and stands for standard views # - Skull X-ray -Chest X-ray - Abdominal X-ray - Limb x-rays - Long Limb views	Adequate quantity	5000
E. Laboratory	I. Basic Blood Analizer & related equipment (Hb, Blood count, Blood Biochemistry etc.) #	1 set	25000
	ii. Kits for HIV and other blood tests@	5 sets each	
	iii. Microscope #	1 set	3000
	iv. Centrifuge #	1 set	3000
	v. Urinanalysis Kits @	Adequate Quantity	
	vi. Incubator #	1	5000
	vii. Supplies(tubes, reagents etc.) @	Adequate quantity	
	viii. Glucometer #	1 set	1000
	ix. Refrigerator #	1	800
	x. Freezer (FFP)#	1	3000

FUNCTION	ITEM	QUANTITY	COST (US $)
II. Dental Services A. Consultation/ Treatment	I. Dental Chair, electrical #	1 set	65 000
	ii. Equipment for treatment # - Extraction # - Filling # - Other basic treatment #	Adequate for 5 to 10 patients per day	3 000
	iii. Drilling unit #	1 set	20 000
	iv. Furniture @	Adequate quantity	2 000
B. Dental X-ray	I. X-ray Equipment #	1 set	25 000
	ii. Automatic Developer#	1 set	15 000
	iii. Protective Equipment #	2 set	4600
C. Dental sterilization	iv. Dental sterilizer #	1 set	15 000
III. Surgery/Anaesthesia A. Emergency / Resuscitation / Anaesthesia / Recovery Room	i. Desk and Chairs @	2 to 3 sets	6 000
	ii. Examination Couch #	3 sets	7 200
	iii. Essential Diagnostic Equipment # - Stethoscope # - Ophthalmoscope # - Otoscope # - ECG machine # - Reflex mallet # - Thermometers # - Sphygmomanometer # - Gynecological speculum # - Proctoscope # - Measuring Tape # - Torch # - Examination lamp# - Miscellaneous #	2 sets	 400 2 000 2 000 20 000 400 200 400 1 200 1 200 40 80 8 000 4 000
	iv. X-ray Viewer #	1	1 000

FUNCTION	ITEM	QUANTITY	COST (US $)
	v. Minor Treatment/Dressing sets @	Adequate quantity	
	vi. Resuscitation trolley (fully equipped) #	2 sets	12 000
	vii. Intubation sets #	2 sets	3000
A. Emergency Resuscitation / Anaesthesia / Recovery Room (Continued)	viii. Coniotomy set #	2 sets	1000
	ix. ECG machine #	1 set	9000
	x. Defibrillator #	1 set	8000
	xi. Portable Ventilator/ Oxygen cylinder #	1 set	6500
	xii. Pulse Oximeter #	1 set	3000
	xiii. Suction Unit #	1 set	4000
	xiv. Nebulizer #	1 set	200
	xv. Backboards/ Vacuum Mattress #	2 sets	7000
	xvi. Excision/Suture sets #	3	4800
	xvii. Perfusion Stands #	3	600
	xviii. Sets for chest-tube insertion, catheterization and venesection. #	2 sets each	1200
	xiv. Anaesthetic gas supply system #	To support 3 to 4 operations per day.	20000
	xv. Drugs and consumables required for induction of Anaesthesia and post-operation recovery (including local and regional anaesthesia @		

FUNCTION	ITEM	QUANTITY	COST (US $)
B. Operating Theaters (OT)	I. Operating tables #	1	14000
	ii. OT Lamps #	2	12000
	iii. Anaesthesia machine #	1	50000
	iv. Oxygen and Anaesthetic gases @	Essential	
	v. Diathermy machine #	1	8000
	vi. Suction Unit for body fluids #	1	4000
	vii. Laparotomy sets #	Sufficient quantity to support 3 to 4 operations per day.	11000
	viii. Thoracotomy sets #		
	ix . Craniotomy sets #		
	x. Wound exploration sets #		
	xi. Sets for amputations #		
	xii. Fracture fixation sets and fixation # equipment #		
	xiii. Appendicectomy and general purpose sets #		
	xiv. Disinfection Equipment #	Adequate	4 000
	xv . Resuscitation/Monitoring Equipment	1 set	
	- trolley with drugs #		1 000
	- Defibrillator #		1 2000
	- Ventilator #		6 500
	- Intubation sets #		1 500
	- Infusion pump #		4 500
	- Suction pump #		4 000
	- Pulse Oximeter #		3 000
	- Oxygen Cylinders #		1 000
	xvi. Patient transport and transfer trolley #	2 per OT	7 000

FUNCTION	ITEM	QUANTITY	COST (US $)
	xvii. Surgical Consumables @	To support 3 to 4 operations per day	
C. Sterilization Room	I. Autoclave Sterilizer #	1 set	40000
	ii. Boiler #	1	4000
	iii. Disinfection Equipment @	1 set	7000
	iv. Fire extinguisher @	1	800
	v. Furniture and supplies @	Adequate	2000
	vi. Machine for cleansing surgical instruments #	1 or 2	2800
IV. WARDS A. General Multi-discipline Wards	I. Collapsible Multi-purpose Hospital Beds #	20 beds (10 per ward)	20000
	ii. Orthopaedic Traction Equipment #	2 sets per ward	9600
	iii. Mini-dispensary (trolley) #	1 per ward	2400
	iv. Essential medical supplies and equipment for inpatient care. @	Adequate quantity based on number of beds	
	v. Furniture, office supplies etc. @	Adequate quantity	
	patients #	inpatients	

FUNCTION	ITEM	QUANTITY	COST (US $)
	vi. Crutches #	4 sets	400
	viii. Wheel chairs #	2 sets	2400
	ix. Cloth patients	1 set	10000
B. Intensive Care Ward	I. Intensive care hospital beds #	2 beds	3 000
	ii. Resuscitation/Monitoring Equipment # - trolley with drugs # - Defibrillator # - Ventilator # - Intubation sets # - Infusion pump # - Suction pump # - Pulse Oximeter # - Oxygen Cylinders #	1 set	 1 000 1 2000 6 500 1 500 4 500 4 000 3 000 1 000
V. SUPPORT SERVICES A. Kitchen	I. Cooking Equipment # - Stoves - Ovens - Boilers - Cooking pots. pans. utensils etc.	1 set (to cater for 20 inpatients)	20 000
	ii. Serving Equipment #	1 set (to cater for 35 staff)	1750
	iii. Cooking Equipment @ - Stoves - Ovens - Boilers - Cooking pots. pans. utensils etc.	1 set (to cater for 35 staff)	35000
	iv. Serving Equipment @	1 set (to cater for 20 inpatients)	1000

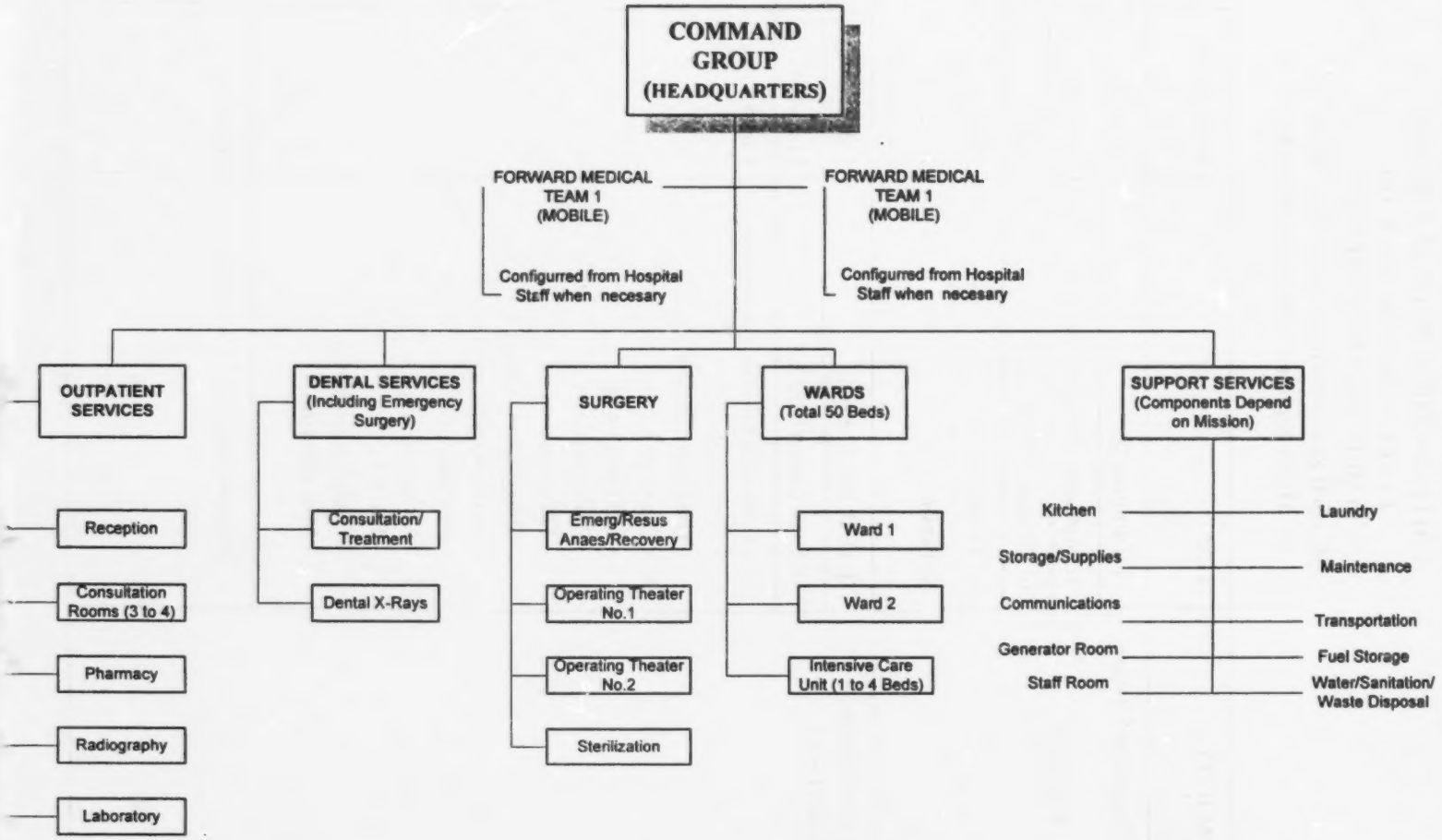
FUNCTION	ITEM	QUANTITY	COST (US $)
	vi. Dishwashers #	1	2000
	vii. Cleaning equipment #	1 set	1000
	viii. Fire Extinguisher @	2	1600
B. Laundry For Hospital Use	I. Clothes Washing Machines #	2 machines	3000
	ii. Clothes Dryers #	1 machines	1500
	iii. Detergents and supplies @	Adequate	
C. Storage /Supplies Room	I. Storage shelves #	Adequate quantity	10000
	ii. Storage cupboards/cabinets #	Adequate quantity	5000
	iii. Refrigerator #	1 or 2	1600
D. Maintenance	I. Equipment and tools for routine maintenance of equipment and infrastructure #	1 set	5000
	ii. First Aid Kit @	1 set	
E. Communications Room	I. Telephone @	2 sets	2000
	ii. Internal Telephone System @	1 set	2000
	iii. Facsimile @	1 set	1000
	iv. Computer with electronic mail @	1 set	3000
	v. Furniture and stationery @	adequate quantity	1000

FUNCTION	ITEM	QUANTITY	COST (US $)
	vi. VHF/UHF Radio @ - with links to CO and Forward Medical Teams	1 set	5000
F. Transportation	I. Fully equipped Ambulances # Includes: - Doctor's Bag # - Oxygen cylinders # - Suction pump # - Resuscitation drugs # - Helicopter landing site Marking equipment # (smoke grenades, Luminous sticks, luminous Sheets etc. - Emergency lighting # - Communication eqpt. # (VHF/UHF)	2 fully equipped ambulances	160 000 3 000 3 000 2 000 1 000 200 200 800
	ii. Vehicle maintenance equipment #	2 sets	10 000
	iii. First Aid Kit @	1 set	
	iv. Furniture and stationery @	Adequate quantity	3800
G. Generator Room	I. Standby Generators (> 20 KVA) #	2 sets	19 000
	ii. Maintenance Equipment #	1 set	4 000
	iii. First Aid Kit @	1 set	
	iv. Fire extinguisher @	1	800

FUNCTION	ITEM	QUANTITY	COST (US $)
H. Fuel Storage	I. Fuel for Generators @	1 week's supply	
	ii. Fire Extinguishers @	2 sets	1600
I. Staff Room	I. Lounge Furniture @	1 set	2000
	ii. Other furniture @	Adequate quantity	6000
	iii. Coffee maker/other beverage appliances @	1 set	4000
J. Water, Sanitation And Waste Disposal	I. Toilet Facilities and sanitation system #	Adequate 20 inpatients as well as 50 outpatients	30000
	ii.Toilet Facilities and sanitation system @	Adequate for 35 staff	30000
	iii. Shower facilities and systems #	For inpatients	25000
	v. Hand washing facilities and systems for staff throughout the hospital #	As per medical hygiene requirement	20000
	vi. Refuse Disposal facilities and system #	Adequate	16000
	vii. Medical disposables (contaminated) collection and disposal system #	Adequate	10000
	viii. Biological waste disposal system #	Adequate	10000
	ix. Water Supply for Hospital Facilities . reverse osmose #	Adequate	150000
Value of medical equipment #		1 180 430	
Value of non=medical equipment @		143 800	

UNITED NATIONS MEDICAL SUPPORT
LEVEL III MEDICAL UNIT

STRUCTURE AND ORGANIZATION



A/C.5/54/49

UNITED NATIONS MEDICAL SUPPORT
LEVEL 3 MEDICAL FACILITY
(EQUIPMENT REQUIREMENT)
@ - Self Sustainment Reimbursement Rate
 # - Major Equipment Reimbursement Rate

FACILITY	ITEM	QUANTITY	COST (US $)
I. Outpatient Services A. Reception	I. Furniture @	Adequate	24000
	ii. Stationery/Documentation @	Adequate	6000
	iii. Computer/Printer @	1 Set	3000
	iv. Telephone @	2 lines	4000
	v. Facsimile @	1 to 2 lines/sets	1000
B. Consultation Rooms (x 4)	I. Desk and Chairs @	1 set per room	11600
	ii. Examination Couch #	1 per room	4800
	iii. Essential Diagnostic Equipment # - Stethoscope # - Ophthalmoscope # - Otoscope # - ECG machine # - Reflex mallet # - Thermometers # - Sphygmomanometer # - Gynecological speculum # - Proctoscope # - Measuring Tape # - Torch # - Examination lamp# - Miscellaneous #	1 set per room	 400 2 000 2 000 20 000 400 200 400 1 200 1 200 40 80 8 000 4 000
	iv. Documentation and Stationery #	Adequate	8000

FACILITY	ITEM	QUANTITY	COST (US $)
C. Pharmacy	I. Analgesics @	Adequate quantity and essential variety to support 50 to 60 outpatients per day for a period of 60 days. The list of drugs are detailed in the United Nations Medical Support Manual.	
	ii. Antipyretics @		
	iii. Antibiotics @		
	iv. Drugs for common respiratory conditions @		
	v. Drugs for common gastro-intestinal conditions @		
	vi. Drugs for common musculo-skeletal conditions @		
	vii. Drugs for common cardiovascular conditions @		
	vii. Drugs for other common illnesses @		
	viii. Resuscitation drugs and equipment (Including Narcotics) @		
	ix. Refrigerator for drugs #	2	1600
	x. Refrigerator for Blood/Blood products #	2	6000

FACILITY	ITEM	QUANTITY	COST (US $)
D. Radiography Room	I. X-ray machine #	1 set	130000
	ii. Automatic Film Processor (or dark room) #	1 set	20000
	iii. X-ray table #	1 table	4000
	iv. X-ray View Box #	2	2000
	v. Protective Equipment for staff and patients #	4 sets	9200
	vi. Other films, cassettes and stands for standard views # - Skull X-ray -Chest X-ray - Abdominal X-ray - Limb x-rays - Long Limb views	Adequate quantity	7500
	vii. Ultrasound Machine #	1 set	60000
E. Laboratory	I. Basic Blood Analysis equipment (Hb, Blood count, Blood Biochemistry etc.) #	2 sets	70000
	ii. Kits for HIV and other blood tests @	5 sets each	
	iii. Microscope #	2 sets	6000
	iv. Centrifuge #	2 sets	6000
	v. Urinanalysis Kits @	Adequate Quantity	
	vi. Incubator #	1	5000
	vii. Supplies(tubes, reagents etc.) @	Adequate quantity	
	viii. Glucometer #	2 sets	2000
	ix. Blood Gas Analyzer #	1 set	28000
	x. Bacterial Culture Material @	Adequate	

FACILITY	ITEM	QUANTITY	COST (US $)
	xi. Refrigerator #	1	800
	xii. Freezer (FFP) #	1	3000
II: Dental Services A. Consultation/ Treatment	I. Dental Chair, electrical #	2 sets	130 000
	ii. Equipment for treatment # - Extraction # - Filling # - Other basic treatment #	Adequate for 10 patients per day	60 000
	iii. Dental drilling unit #	2 sets	40 000
	iv. Furniture @	Adequate quantity	4 000
B. Dental X-ray	i. X-ray Equipment #	1 set	25 000
	ii. Automatic Developer#	1 set	15 000
	iii. Protective Equipment #	2 set	4 600
C. Dental sterilization	I. Dental sterilizer #	1 set	15 000
III. Surgery/Anaesthesia A. Emergency / Resuscitation / Anaesthesia / Recovery Room	i. Desk and Chairs @	2 to 3 sets	6 000
	ii. Examination Couch #	3 sets	7 200
	iii. Essential Diagnostic Equipment # - Stethoscope # - Ophthalmoscope # - Otoscope # - ECG machine # - Reflex mallet # - Thermometers # - Sphygmomanometer # - Gynecological speculum # - Proctoscope # - Measuring Tape # - Torch # - Examination lamp# - Miscellaneous #	3 sets	 600 3 000 3 000 30 000 600 300 600 1 800 1 800 60 120 12 000 6 000
	iv. X-ray Viewer #	2 to 3	3 000
	v. Minor Treatment/Dressing sets #	Adequate quantity	6 000

FACILITY	ITEM	QUANTITY	COST (US $)
	vi. Resuscitation trolley (fully equipped) #	2 sets	12 000
A. Emergency Resuscitation / Anaesthesia / Recovery Room (Continued)	vii. Intubation sets #	4 sets	6000
	viii. Coniotomy set #	4 sets	2000
	ix. ECG machine #	2 sets	18000
	x. Defibrillator #	2 sets	16000
	xi. Portable Ventilator/ Oxygen cylinder #	2 sets	13000
	xii. Pulse Oximeter #	2 sets	6000
	xiii. Suction Unit #	2 sets	2000
	xiv. Nebulizer #	2 sets	400
	xv. Backboards/ Vacuum Mattress #	4 sets	14 000
	xvi. Excision/Suture sets #	6	9600
	xvii. Perfusion Stands #	4 to 6	1200
	xviii. Sets for chest-tube insertion, catheterization and venesection. #	4 sets each	4800
	xiv. Anaesthetic gas supply system #	To support up to 10 operations per day.	20 000
	xv. Drugs and consumables required for induction of Anaesthesia and post-operation recovery (including local and regional anaesthesia @		

FACILITY	ITEM	QUANTITY	COST (US $)
B. Operating Theaters (OT) (2 OTs)	I. Operating tables #	1 per OT	28 000
	ii. OT Lamps #	2 per OT	24 000
	iii. Anaesthesia machine #	1 per OT	100 000
	iv.Oxygen and Anesthetic gases @	Essential	
	v. Diathermy machine #	**1 per OT**	**16 000**
	vi. Suction Unit for body fluids #	**1 per OT**	**8 000**
	vii. Laparotomy sets #	**Sufficient quantity to support up to 10 operations per day.**	**33 000**
	viii. Thoracotomy sets #		
	ix . Craniotomy sets #		
	x. Wound exploration sets #		
	xi. Sets for amputations #		
	xii. Fracture fixation sets #		
	xiii. Appendicectomy and general purpose sets #		
	xiv. Disinfection Equipment #	**Adequate**	**8 000**
	xv . Resuscitation/Monitoring Equipment **- trolley with drugs #** **- Defibrillator #** **- Ventilator #** **- Intubation sets #** **- Infusion pump #** **- Suction pump #** **- Pulse Oximeter #** **- Oxygen Cylinders #**	**1 set per OT**	 **2 000** **24 000** **13 000** **3 000** **9 000** **8 000** **6 000** **2 000**
	xvi. Patient transport and transfer trolley #	**2 per OT**	**14 000**
	xvii. Surgical Consumables @	**To support up to 10 operations per day**	
C. Sterilization Room	**I. Autoclave Sterilizer #**	**2 sets**	**80 000**
	ii. Boiler #	**2**	**8 000**

FACILITY	ITEM	QUANTITY	COST (US $)
	iii. Disinfection Equipment @	2 set	14 000
	iv. Fire extinguisher @	1	800
	v. Furniture and supplies @	Adequate	2000
	vi. Machine for cleansing surgical instruments #	1 or 2	5600
IV. WARDS A. General Multi-discipline Wards	I. Collapsible Multi-purpose Hospital Beds #	50 beds (25 per ward)	50 000
	ii. Orthopaedic Traction Equipment #	4 sets per ward	9600
	iii. Mini-dispensary (trolley) #	1 per ward	2400
	iv. Essential medical supplies and equipment for inpatient care. @	Adequate quantity based on number of beds	
	v. Furniture. office supplies etc. @	Adequate quantity	
	vi. Utensils for catering food to patients #	For 50 inpatients	10 000
	vi. Crutches #	8 sets	800
	viii. Wheel chairs #	4 sets	4800
	ix. Cloths patients	2 sets	20 000
B. Intensive Care Ward	1. Intensive care hospital beds #	4 beds	6000

FACILITY	ITEM	QUANTITY	COST (US $)
	ii. Resuscitation/Monitoring Equipment #	2 sets	
	- trolley with drugs #		2 000
	- Defibrillator #		24 000
	- Ventilator #		13 000
	- Intubation sets #		3 000
	- Infusion pump #		9 000
	- Suction pump #		8 000
	- Pulse Oximeter #		6 000
	- Oxygen Cylinders #		2 000
V. SUPPORT SERVICES A. Kitchen	I. Cooking Equipment # - Stoves - Ovens - Boilers - Cooking pots. pans. utensils	1 set (to cater for 50 inpatients)	50 000
	ii. Serving Equipment #	1 set (to cater for 90 staff)	4500
	iii. Cooking Equipment @ - Stoves - Ovens - Boilers - Cooking pots. pans. utensils	1 set (to cater for 90 staff)	90 000
	iv. Serving Equipment @	1 set (to cater for 50 inpatients)	2500
	v. First Aid Kit @	1	
	vi. Dishwashers #	2	4000
	vii. Cleaning equipment #	2 sets	2000
	viii. Fire Extinguisher @	2	1600
B. Laundry For Hospital Use	I. Clothes Washing Machines #	3 machines	4500
	ii. Clothes Dryers #	2 machines	3000
	iii. Detergents and supplies @	Adequate	

FACILITY	ITEM	QUANTITY	COST (US $)
C. Storage /Supplies Room	I. Storage shelves #	Adequate quantity	13 000
	ii. Storage cupboards/cabinets #	Adequate quantity	7000
	iii. Refrigerator #	2 or 3	2400
D. Maintenance	I. Equipment and tools for routine maintenance of equipment and infrastructure #	2 sets	10000
	ii. First Aid Kit @	1 set	
E. Communications Room	I. Telephone @	2 sets	4000
	ii. Internal Telephone System @	1 set	2000
	iii. Facsimile @	1 set	1000
	iv. Computer with electronic mail @	1 set	3000
	v. Furniture and stationery @	adequate quantity	1000
	vi. VHF/UHF Radio @ - with links to CO and Forward Medical Teams	1 set	5000

FACILITY	ITEM	QUANTITY	COST (US $)
F. Transportation	I. Fully equipped Ambulances # Includes: - Doctor's Bag # - Oxygen cylinders # - Suction pump # - Resuscitation drugs # - Helicopter landing site Marking equipment # (smoke grenades, luminous sticks, luminous Sheets etc. - Emergency lighting # - Communication eqpt. # (VHF/UHF)	2 fully equipped ambulances	160 000 . 3 000 3 000 2 000 1 000 200 200 800
	ii. Vehicle maintenance equipment #	2 sets	10 000
	iii. First Aid Kit @	1 set	
	iv. Furniture and stationery @	Adequate quantity	3800
G. Generator Room	I. Standby Generators(> 20 KW) #	3 sets	28 500
	ii. Maintenance Equipment #	1 set	6 000
	iii. First Aid Kit @	1 set	
	iv. Fire extinguisher @	1	800
H. Fuel Storage	I. Fuel for Generators @	1 week's supply	
	ii. Fire Extinguishers @	2 sets	1600
I. Staff Room	I. Lounge Furniture @	1 set	2000
	ii. Other furniture @	Adequate quantity	8400
	iii. Coffee maker/other beverage appliances @	1 set	4000

FACILITY	ITEM	QUANTITY	COST (US $)
J. Sanitation And Waste Disposal	I. Toilet Facilities and sanitation system #	Adequate 50 inpatients as well as 50 outpatients	30 000
	ii.Toilet Facilities and sanitation system@	Adequate for 90 staff	60 000
	iii. Shower facilities and systems #	For inpatients	25 000
	v. Hand washing facilities and systems for staff throughout the hospital #	As per medical hygiene requirement	20 000
	vi. Refuse Disposal facilities and system #	Adequate	16 000
	vii. Medical disposables (contaminated) collection and disposal system (oven) #	Adequate	10 000
	viii. Biological waste disposal system #	Adequate	10 000
	ix. Water Supply (reverse osmose) #	Adequate	150 000
Value of medical equipment #			2 052 500
Value of non=medical equipment @			267 100

Appendix II

United Nations requirements for the provision of medical supplies

Drugs, medical consumables (sterile or non-sterile), dental, laboratory, hygienic, blood and other health supplies used in United Nations peacekeeping operations

Policy within the Department of Peacekeeping Operations

The rules and regulations stipulated below must be implemented in all medical support matters within the Department of Peacekeeping Operations, including in procurement via the following:

(a) Procurement action through the Procurement and Transportation Division, Headquarters, New York;

(b) Local procurement in DPKO field missions;

(c) Self-sustainment contracts of troop-contributing countries or provision of medical supplies on the basis of a letter of assist;

(d) Donations from other agencies, manufacturers, vendors, Governments and other parties.

Rules and Regulations

Quality assurance and quality control of medical supplies (drugs and medical consumables)

All medical supplies and consumables used within the Department of Peacekeeping Operations must meet the United Nations standard (international standard). For a definition of "international standard", see:

- United Nations Medical Support Manual "Medical support policies and procedures";[1]
- Ibid., Annex Z "Quality assurance and quality control; product liability".[2] (For the complete text, see appendix III.)

Requisitions/Purchase orders

Each requisition and/or purchase order must contain the following information:

- Quality assurance/product liability requirement (Annex Z) [appendix III]; including package/ storage (cooling chain) requirements following World Health Organization/International Rules of Pharmacopoeia; [1,7-10]
- Generic name/description;[1,5,6]
- Form/presentation/type;
- Strength;
- Unit of issue (package size);
- Shelf-life requirements/expiration dates:
  - Usually for drugs: at least 2 years;
  - For vaccines: at least 6 months;
  - For blood: at least 4 weeks;
- Quantity requested;
- Terms of delivery:
  - Usually within 4 weeks after ordering;
  - No partial delivery accepted;
  - Transportation according to rules of "United Nations recommendations on the transport of dangerous goods";[3] and the International Air Transport Association (IATA) rules on dangerous goods-regulations;[4]
- Package/storage requirements (cooling chain); [3,4,7]
- Labels must show generic names and instructions (how to use the drug) and must be in the English language.[6]

Notes

[1] United Nations Medical Support Manual, (Medical Supply Unit, DPKO), revision 1, September 1996.

[2] United Nations Medical Support Manual, (Medical Supply Unit, DPKO), January 1996, annex Z (contained in appendix III below).

[3] Recommendations on the transport of dangerous goods, 9th rev. ed., United Nations, New York, 1995.

[4] International Air Transport Association, Dangerous Goods-Regulations, 35th ed. (Montreal/Geneva, 1994).

[5] The Use of Essential Drugs, 8th List. Sixth Report of the WHO Expert Committee (WHO, 1995).

[6] International Non-proprietary Names (INN) for Pharmaceutical Substances, List No. 8 (WHO, 1992).

[7] The International Pharmacopoeia, 3rd ed., vols. 1-4 (WHO, 1994).

[8] WHO Expert Committee on Biological Standardization, 42nd report, Technical Report Series No. 822: "GMP" - "Quality Assurance" (WHO, 1992).

[9] WHO Expert Committee on Biological Standardization, 32nd report, Technical Report Series No. 823: "GMP" – "Guidelines – Manufacturers" (WHO, 1992).

[10] WHO Expert Committee on Specifications for Pharmaceutical Preparations, 31st report, Technical Report Series No. 790 (WHO, 1990).

[11] WHO Expert Committee on Biological Standardization, 41st report, Technical Report Series No. 814: "Blood Products" – "Quality Assurance" (WHO, 1992).

[12] WHO Expert Committee on Biological Standardization, 43rd report, Technical Report Series No. 840: "Blood Products" – "Quality Assurance" – "Requirements for the Collection, Processing and Quality Control of Blood, Blood Components and Plasma Derivatives"(WHO, 1992).

[13] WHO Expert Committee on Biological Standardization, 44th report, Technical Report Series No. 848: "Blood Products" – "Quality Assurance" (WHO, 1992).

[14] WHO Expert Committee on Biological Standardization, 45th report, Technical Report Series No. 858: "Guidelines for Manufacturers" – "Quality Assurance" (WHO, 1992).

[15] The Collection, Fractionation, Quality Control and Uses of Blood and Blood Products (WHO, 1981).

[16] WHO Expert Committee on Specifications for Pharmaceutical Substances, 29th report, Technical Report Series No. 704: "WHO Qualification Scheme on Quality of ..." (WHO, 1984).

[17] Safe Blood and Blood Products: Guidelines for Safe Blood Transfusion Practices, Blood Donation, Screening for HIV, Blood Group Serology (WHO, Geneva, 1993).

[18] WHO Drug Information (WHO, 1993).

[19] WHO Expert Committee on Specifications for Pharmaceutical Preparations, 27th report, Technical Report Series No. 645 (WHO, 1980).

[20] Guidelines for Developing National Drug Policies (WHO, 1988).

Appendix III

Quality Assurance and Quality Control; Product Liability*

1. All products supplied by your company shall be produced in accordance with the good manufacturing practices (hereinafter "GMP") in the country of manufacture and the GMP shall be consistent with international standards. For the purposes of this Agreement, "international standards" shall mean standards according to WHO Manufacturing Practices for Biological Products.

2. The production of the products and the products themselves shall meet strict quality assurance and quality control (hereinafter "QA/QC") standards that are established for pharmaceutical products provided that said standards are consistent with international QA/QC standards. For the purposes of this Agreement, "international standards" shall means standards according to the WHO Requirements for the Collection, Processing and Quality Control of Blood, Blood Components and Plasma Derivatives.

3. The Company shall permit a duly authorized representative of the buyer, upon reasonable notice, to inspect the premises of the Company from time to time to ascertain that the provisions of this article are being complied with by the Company.

4. In the event that the Company, at any time, fails to meet GMP or QA/QC standards as provided for in this article, the Company shall immediately, at the direction of the buyer or the Government of the country, recall all products not yet sold and cease further sales until such standards are met.

* Annex Z of the United Nations Medical Support Manual (see appendix II).

Appendix IV

Revised communication performance standards

1. The telephone is the preferred means of communications for the contingent; it will be utilized as much as possible for internal communications within the headquarters, and with non-mobile sub-elements and subunits of the contingent located in the main base cap. The requirement for VHF/UHF-FM and HF communications within the area of operations will be determined during the site survey and is subject to negotiation with the troop-contributing country. The standards for each communication's subcategories are defined below, in order of usage preference. To receive the communications self-sustainment reimbursement rate, the contingent must meet the following criteria:

Telephone

2. The contingent will utilize the telephone as its primary means of internal communications within the main base camp. The contingent headquarters and stationary sub-elements (such as offices, workspaces, observation posts, guard posts, etc.) and subunits, located at the main base camp, will be wired into the telephone system, as early into the operation as possible, in order to maximize the use of telephonic communications. The telephone system that is deployed should have the ability to interface with the telephone system that is provided on the mission level. The interface could be on the most simple level (i.e., two-wire trunk or better). This would then allow the contingent the ability to access the local PTT system, in cases where such systems are available. Reimbursement will be based upon the number of personnel in the main base camp and those elements of the contingent at other locations that are served by authorized contingent-provided telephone services. To receive the self-sustainment reimbursement rate, the contingent will:

(a) Provide, install, operate and maintain a switchboard and telephone network that is capable of maintaining telephonic communications within the main base camp;

(b) Provide, install and maintain adequate numbers of telephone instruments to the contingent and its subunits and sub-elements within the area of operations (this includes all cable, wire, and connectors, and other hardware that may be required);

(c) Provide a sufficient stock of spare parts and consumables to support operations, and the repair or replacement of malfunctioning equipment.

VHF/UHF-FM Communications

3. VHF/UHF-FM communications will be used as the primary means of radio communications with subunits and sub-elements of the contingent that are in a tactical or mobile environment, and thus unable to communicate via telephonic means. While VHF/UHF-FM communications may be used by the contingent as a means of backup communications to the telephone, this type of usage in itself is not a sufficient reason for reimbursement. Reimbursement will be based on the number of personnel in the contingent. To receive the self-sustainment reimbursement rate, the contingent will:

(a) Maintain one command-and-control net down to the subunit (section/squad) level;

(b) Maintain one administration net;

(c) Maintain one dismounted patrol and secu ty net or other primary non-vehicle mounted net;

(d) Provide a sufficient stock of spare parts and consumables to support operations and the repair or replacement of malfunctioning equipment.

HF communications

4. HF communications will be used as the primary means of communications with subunits and sub-elements of the contingent that are operating within the area of operations that are beyond range of VHF/UHF-FM communications assets and are operating in a tactical or mobile environment, and thus unable to communicate via telephone or VHF/UHF-FM. While HF communications may be used as a backup means of communication to the telephone or to VHF/UHF-FM communications, this type of usage in itself is not a sufficient reason for reimbursement. Additionally, the use of HF communications solely as a means of national rear-link will not be reimbursed. Reimbursement will be based on the authorized number of personnel in the subunits and sub-elements of the contingent operating within the areas of operations beyond the range of VHF/UHF-FM communications assets and are operating in a tactical or mobile environment, and thus unable to communicate via

telephone or VHF/UHF-FM. To receive the self-sustainment reimbursement rate, the contingent will:

(a) Communicate with subunits and sub-elements of the contingent that are in a tactical or mobile environment, and thus unable to communicate via telephonic means, and beyond the range of VHF/UHF-FM base station communications;

(b) Provide a command-and-control net using non-vehicular mounted HF communications equipment;

(c) Provide a sufficient stock of spare parts and consumables to support operations and the repair or replacement of malfunctioning equipment.

Item	*Quantity*	*Estimated cost (United States dollars)*
A. Minor equipment – laboratory kit		
Glucometer	1	(1 000)
Refrigerator	1	(800)
Total		**1 800**
B. Minor equipment – treatment kit		
Coniotomy set	1	(500)
Oxygen cylinder	2	(400)
Nebulizer	1	(200)
Suction unit	1	(1 000)
Perfusion stands	2	(400)
General purpose sets	3	(600)
Sets for chest-tube insertion, catheterization and venous "cut-downs"	1 set of each	(600)
Crutches	2 pairs	(120)
Total		**3 820**
C. Minor equipment – diagnosis kit		
Stethoscope	1	(100)
Ophthalmoscope	1	(500)
Otoscope	1	(500)
Reflex mallet		(100)
Thermometers		(50)
Sphygmomanometer	1	(100)
Gynaecological speculum		(300)
Proctoscope	1	(300)
Measuring tape		(10)
Torch		(20)
Miscellaneous additional diagnosis material		(1 000)
X-ray view box	1	(1 000)
Total		**3 980**

Annex IX

Scope of work of the Post Phase V Working Group

No later than six months prior to Working Group meeting

Secretariat will request the appropriate data (1995-1999) for major equipment from the Member States in accordance with annex I and annex III.A of the Phase V Working Group report on methodology for periodic review.

Secretariat will request the appropriate data on generic contingents/units for a period of six months for each category of self-sustainment. The "generic" units are based on the United Nations standby arrangement — table of organizations and equipment (1998) transmitted by Mission Planning Service, Department of Peacekeeping Operations, to all Member States in November 1998.

Secretariat should invite Member States to participate in the post Phase V Working Group.

No later than three months prior to Working Group meeting

Member States will provide data (1995-1999) required in accordance with annex I of the Phase V Working Group report on methodology for periodic review.

Member States will provide data (1995-1999) required in accordance with annex III.A of the Phase V Working Group report on methodology for periodic review on the following equipment for special cases:

Main battle tank	(heavy)
Main battle tank	(medium)
Tank recovery	(heavy)
Tank recovery	(medium)
Infantry carrier	(track)
Infantry carrier	(wheel)

Logistic equipment

Water tanks/bladders	(by size)
Water purification station	(by capacity)
Fuel tanks/bladders	(by size)

Member States will provide the appropriate data on generic contingents/units for a period of six months for each category of self-sustainment. The "generic" units are based on the United Nations standby arrangement — table of organizations and equipment (1998) transmitted by Mission Planning Service, Department of Peacekeeping Operations, to all Member States in November 1998.

Force Headquarters of 50 personnel

Force Headquarters Support Unit of 65 personnel, to include

- Military Police Detachment of 12 personnel
- Postal Unit of 15 personnel

	Mechanized Infantry Battalion of 850 personnel, consisting of – Headquarters element of 72 personnel – Three rifle companies of 155 personnel each – Mechanized company of 173 personnel – Logistics company of 140 personnel, make-up – 20 personnel each (Headquarters, Signals, Engineers, Mortars, and Medical Platoon) – 25 Quartermaster Platoon – 15 Maintenance and Transport Platoon Field Engineer Unit of 505 personnel, consisting of – Headquarters element of 126 personnel – 2 field engineer companies of 157 personnel each – Support Company of 65 personnel
No later than six weeks prior to Working Group meeting	Secretariat will provide consolidation data (1995-1999) from annex I provided by the Member States in accordance with annex II of the Phase V Working Group on methodology for periodic review. Secretariat will provide consolidation data (1995-1999) for Special Cases from Member States (annex III.A) in accordance with annex IV.A of the Phase V Working Group on methodology for periodic review. Secretariat will provide consolidation data for Self-sustainment from Member States in a relative format in accordance with annex IV.B of the Phase V Working Group on methodology for periodic review.
No later than Jan.-Feb. 2001 (approximately 10 days)	The Working Group meets to consider and discuss the data provided by Member States and collected by the Secretariat and its implications.